FEBRUARY, 1960

AMATEUR RADIO

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VK2WI: Sundays, 1100 hours EST, simultaneously on 3575 Kc., 7146 Kc., and 145.0 Mc. Intrastate call-backs taken on 7050 Kc..

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VK4WI: Sundays, 0900 hours EST, simultaneously on 7146 Kc. and 14.342 Mc. Intrastate hook-ups taken on 7105 Kc.

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AMATEUR RADIO

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EDITORIAL

As previously covered in our Editorial of Nov. 1958, the W.I.A. is concerned about the implications of interference by the various communication services to t.v. viewers. The particular problems confronting the Amateur were stated in some detail, and arising from this matter, it was considered that a "get-together" of t.v. manufacturers, public utilities and other interested parties and chaired by the P.M.G. might be a way of finding a solution to the current problem. To this end, the Federal Executive approached the Department with the request to hold a preliminary meeting. This meeting was subsequently held just prior to Christmas and attended by members of Executive and officers of the Department.

The particular problems which had been encountered by Amateurs were stated and some recent instances of t.v.i. troubles presented. It soon became apparent that there was no quick or easy answer. During discussion, the approach by the R.S.G.B. to the British Post Office and the results of their representations were explained. The W.I.A. required, if possible, an answer along the same lines given by the B.P.O. to the R.S.G.B.—a clear statement setting out formal rules for the guidance of Amateurs in a procedure to use in the case of complaint.

The officers of the Department were sympathetic and appreciative of the problems involved and agreed to investigate the matter further with a view to evolving a clear procedure for the channelling and handling of complaints. Such a procedure would go a long way towards satisfactorily dealing with any complaint made and would also be a guide to the individual in his public relations with the complainant.

This, of course, is not the complete answer. There are many involved cases where no one can be honestly blamed for t.v.i. This raises another aspect which must be eventually tackled. Where does the t.v. viewer or the Amateur stand in such a case? The t.v. viewer must be diplomatically made to realise that there are other users of the ether who have equal or perhaps better rights than himself. We are not suggesting the Amateur is the right person to point out this fact. This can only be done by a responsible Government body and by gradual education of the public to accept the idea.

The recent formation of T.V.I. Committees in the Divisions will greatly assist in the overall problem, particularly from the aspect of giving expert technical advice to the Amateur in trouble. Technical articles by these committees in "Amateur Radio" will also serve a useful purpose in the best ways to t.v.i. proof transmitters. A constant flow of cases from these bodies to the Executive will help maintain a useful liaison with the Department, to our mutual benefit. Another avenue vitally interested in the associated problems is the Standards Association of Australia who have a number of active working committees engaged in examining cases and laying down standards for adoption by manufacturers of equipment of potential interference sources.

Above all, the Amateur must be patient and forebearing for the moment, knowing that there are many problems yet to be solved in this new medium. He can, however, rest assured that he has not been forgotten and that his is not the only problem confronting the authorities. The early prospect of a clear procedure for the handling of complaints is the forerunner of similar measures, we hope, to make the air waves livable for all.

FEDERAL EXECUTIVE.

THE CONTENTS

Mobile, the Economical Way

H. F. RUCKERT,* VK2AOU

THE September issue of "Amateur Radio" brought a proposal by the writer discussing the possibilities of how we can use high gm valves in mobile equipment without a h.t. supply by using the 12-14 volt car battery also for the plate and screen grid. We are now discussing a car radio which was recently successfully built using this proposal. Recently, several publications have described similar circuits, but the so-called special hybrid 12v. valves were used in these cases, and coil winding data were not given.

If you have enough space in your car, you can buy six of the popular EF50 type valves for ten shillings, or you may even get the valves cheaper from disposals, and these will work most satisfactorily. But if you wish to fit the car radio into the limited space provided by the car manufacturer, you will have to use miniature glass valves of more recent origin.

We are all very familiar with the usual radio receiver where the negative pole of the supply is earth or connected to the car chassis. But many modern cars have the positive pole of the car battery connected to the chassis, and it may therefore be more interesting to show the circuit suitable for this case. The writer's car was of this type also. At first it may seem strange that we have to connect the screen grid to chassis to get B+ (12-14v.) on this electrode, but it works just as well. The writer used the valves he had available or could swap against other components.

The r.f. stage uses a Western Electric v.h.f. valve, type 5847, with a gm of 12.5 mA/V, but a 6AG5 or 6AU6 would have done the job nearly as well.

Valves with a high gm and operated with only 12v. on the screen grid, require only a fraction of a volt as grid bias. If an indirectly heated valve is operated with a high grid 1 resistor, the faster electrons pass the space charge and can land on the control grid, forming a negative bias of —1.3v. By reducing the grid leak resistor, we can adjust the bias to the required value. Too large a resistor and too high bias will cause the valve to operate in class C and distortion results. The stage gain will also be low by working with a too low dynamic gm.

By the same reason we can only connect the a.g.c. voltage to one, or at the most two stages, or it will cut the receiver off too soon and a far too low sensitivity will result. A mobile receiver requires a good a.g.c. and it is interesting to see that this circuit can handle nicely signals between 10 μV. and 1 volt with a.g.c. only at the mixer stage, which has a remote cut-off characteristic, whilst the other valves are of the sharp cut-off variety.

The aerial coupling, the grid and plate tuned circuits are of conventional design with a trimmer in parallel with each coil. A small three-gang air dielectric variable capacitor is used. A 6BA6 valve serves as mixer with a separate oscillator. The bias comes from the grid current of the mixer and the diode current of the a.g.c. diode via the resistors of the a.g.c. line.

A high gm triode oscillator valve helps to get stable oscillation over the tuning range. One half of a 6J6 is used, but a 12AT7 valve would have been just as good (not a 12AX7).

Only the heater circuit has to be changed if different valves are employed. The identical heaters of the r.f. and mixer stage are in series. The 6J6 needs 0.45 amp. heater current; a 42 ohm resistor, which is in parallel with the 6J6 heater, brings the current to 0.6 amp. In series with this set-up are the two parallel heaters of the i.f. and 1st a.f. valve, to form the second heater chain with 12 volts. The total heater current drain is therefore 0.9 amp.

The mixer cathode had to be connected to the centre tap of the oscillator coil to prevent too much damping of the oscillator and limiting of the oscillator voltage at the mixer grid to the required value.

The cold end of the air capacitor and of the feed back coil are to the chassis and on B+. Small ferrite pot core coil assemblies are used which have one slug and only enough winding space for one coil of the i.f. filters each.

The simplest way to get the necessary coupling effect between the two tuned circuits of each band filter is capacitive coupling. Very small coupling capacitors of about 2 pF. would be required if the hot ends of the filters (plate and grid) would be coupled together. Therefor centre taps were provided on all i.f. coils and this allows the use of 8-12 pF. as coupling capacitors, which makes it easy to adjust the bandwidth of the i.f. stage.

The i.f. stage again uses a high gm valve, type 6AM6, but a 6AG5 or 6AU6 would have given nearly the same gain. There are also now available various fine t.v. set i.f. strip valves with high gm and sharp or remote cut-off characteristics, which could be used right through this or similar receivers including Amateur band converters.

The two diodes and the first a.f. triode of the 6AV6 work in the usual way. If the a.g.c. voltage tends to be too high and blocks the receiver, a smaller coupling capacitor than 60 pF. may be used. The grid leak resistors, determining the bias, operation and output of the a.f. stages, had to be reduced to bring the distortion free output and drive far enough up.

The 100 pF. capacitor at the grid of the second half of the 6J6 valve reduces stray oscillator voltage and acts as a fixed tone control at the same time.

The B— line filter consists of a 50 ohm ½ watt resistor and a 100 μF. miniature electrolytic capacitor. The total plate and screen grid current of the receiver is in the order of 5 mA.

In the final a.f. stage an OC16 transistor was employed. The circuit of this stage uses the recommendations of the transistor manufacturer with good results. The input transformer is a step-down type with the ratio 23 : 1. A 1.3 ohm resistor fixes the base voltage to about 1.2 volts. This resistor reduces the heater voltage to 12-13 volts, because battery voltage reaches 14 volts if the generator is charging. At the same time, the voltage divider formed by the 1.3 ohm resistor and the heater chain keeps the base voltage within close limits.

The emitter current passes through a copper wire wound resistor of 1.8 ohms. About 6 feet of 38 s.w.g. copper enamel insulated wire can be wound on a 2 watt resistor body. The temperature co-efficient of the copper wire prevents the transistor running away at high operating temperatures, and this should assure a long useful life.

Of the 6 watts the transistor consumes, 2.5 watts are available as a.f. power output with low distortion (10% distortion at 2.9 watts output). It is quite obvious that we can rarely use more than half the maximum available power, and most likely a smaller transistor such as the OC30 would be sufficient.

A 3" x 10" loudspeaker would have fitted nicely in the space provided by the car manufacturer, but a t.v. type of 4" x 5" was available.

A 2 amp. fuse is recommended so that a short circuit in the radio will not blow out the 35 amp. accessory fuse in the car. The total power consumption amounts to 20 watts only. This is nearly one-third of the battery drain some vibrator type car radios take. In other words we have saved the power for a short wave converter and a small mobile transmitter.

No attempt had been made to build the receiver as small as possible, so the available space was used. The upper part of the circuit including all valves and associated components was mounted on a chassis of 6" x 7", which was ¾" high. This part of the set is in a shielded case 3" high. The loudspeaker was mounted, as recommended by the transistor manufacturer, on a wooden baffle and covered around the back by an aluminium heat sink, carrying the transistor, transformers and the other components shown on the lower part of the circuit.. If the air vent is opened, when driving in warm weather, the stream of fresh air reaches the heat sink and transistor under the dash board too. A four-core cable connects the two receiver parts with each other.

These circuit features have been mentioned in detail because they may be useful if a s.w. or v.h.f. converter is added and the car radio acts as double i.f. and a.m. amplifier or if a transmitter v.f.o. and modulator is planned.

This type of circuit with 12-14 volts is quite simple and very economical to build and operate.

In many mobile installations the useful gain and sensitivity of receivers is not so much limited by the valve noise (effective gm) than by the interference caused by the car's ignition system and other electrical apparatus

* 25 Berrille Road, Beverly Hills, N.S.W.

plus the electrical interference caused by other road users, therefore we do not loose much by having only a fraction of the gm the valves would have at 100 to 250v. B+.

The components used are of the types made for transistorised receivers. All resistors, with the exception of the two at the transistor, are of the one-tenth to one-quarter watt type. All capacitors, up to and including the 510 pF. padder capacitor, are of the NPO K factor 32 version, which have practically no temperature drift and their P.F. is 0.03%, which is better than most mica capacitors. The three trimmers are disc ceramic types. With the exception of the four 6 and 12v. electrolytic capacitors, all other coupling and bypass capacitors are ceramic K factor 9000 types, which have a capacity maximum at the operating temperature. The ceramic dielectric of the NPO and K 9000 is only 0.008" thick, therefore these capacitors require less space than other types.

Ducon Condenser Ltd. now make locally a very small ferrite pot core coil assembly which is very easy to use and its small size makes it ideal for car radios, transistor portable equipment, etc. The high Q values obtainable make this coil also attractive for all receiver applications. The complete assembly measures, with can and slug, only ¾" high and the chassis space required is only slightly more than ¾" square.

The high permeability of the Q-type ferrite and the high effective permeability of the pot core assembly calls only for relatively few turns. The turns are very small and so not much copper wire is required, resulting in low ohmic losses in spite of the relatively fine wire, if 100 turns have to be used.

All these factors bring a high Q about usually not found on much larger so-called miniature coils.

The following simple formula may be used to work out the number of turns required to get any inductance from 0.8 μHy. to 800 μHy.:

$$\text{Turns} = 3.7 \times \sqrt{\text{Inductance in } \mu\text{Hy.}}$$

(with slug fully-screwed in).

The temperature coefficient of the coils is small and the radio does not show any frequency drift with changing temperatures. The receiver sensitivity is uniform over the entire range.

COIL TABLE

	Turns	μHy.	Q
Aerial coil	15	13.4	—
R.f. stage grid coil	55	200	112-132
Mixer grid coil	55	200	136-150
Oscillator coil	40	100	75
Feedback coil	20	25	—
I.f. coil	100	600	160

The ferrite slug allows an inductance variation of ± 15%. A metal screw driver can be used for alignment. The screw driver slot goes through the whole slug, so the slug can be adjusted even when the top end is broken out. If the abovementioned formula is used the slug allows a reduction of the maximum inductance by nearly 30% (25% with the first turn).

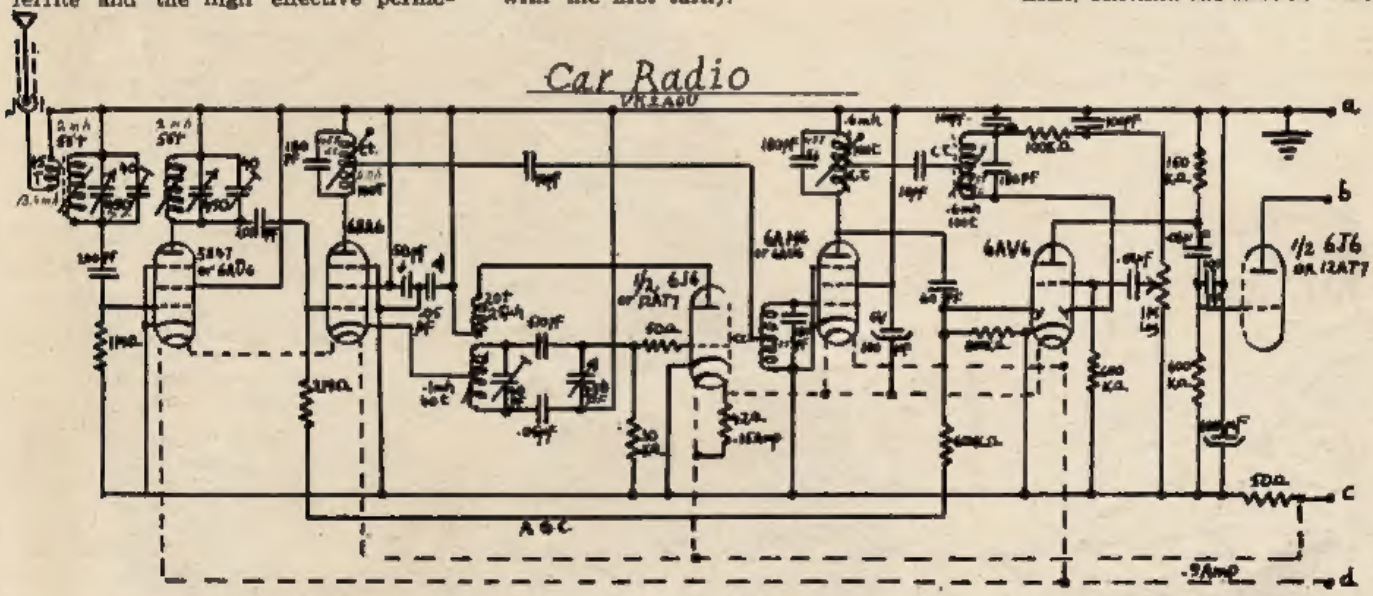
For the i.f. coils, 42 s.w.g. copper enamel insulated wire was used. For the other coils, 38 s.w.g. copper enamel insulated wire was used.

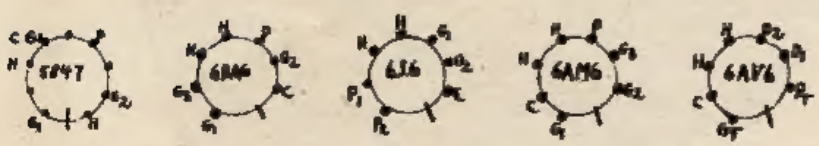
Due to the fact that there is no vibrator and a.c. power supply, the receiver works absolutely quiet. With the receiver not tuned to a station and the car engine off we can just hear the front end noise of the receiver due to the overall high gain with the volume control wide open. Starting the car showed S5 ignition noise. Installing a noise suppression capacitor at the ignition coil where the cable goes to the starter switch reduced the noise to S3, which is equal to the engine noise in top gear, but this level is often below the tyre road noise figure.

Country stations can be received in Sydney with the whip aerial only two feet long and the a.f. volume only half open—and ignition noise does not exist. Therefore no further steps were necessary to reduce the ignition noise. All high tension cables between the ignition coil, the distributor and the spark plugs have a resistor thread instead of a copper wire as conducting core. The cable between the ignition coil and distributor measures 20,000 ohms. This type of h.t. wire seems to suppress ignition noise very successfully, because neither an aerial hash coil nor a B—r.f. filter was required.. The car is a well looked-after Vauxhall Victor.

LITERATURE

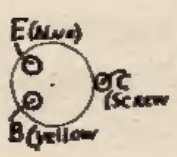
"Mullard Outlook," May-June 1958.
"Radio, Television and Hobbies," June 1959.

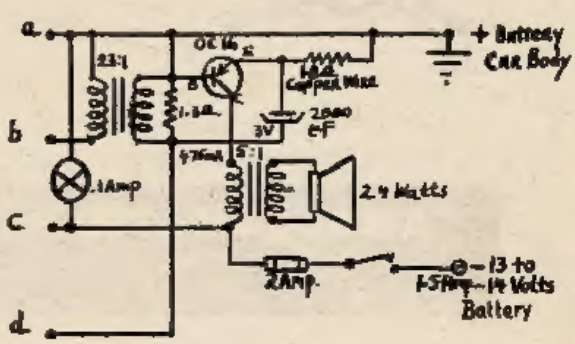




R.F. Coils: 0.15 mm. diam. Q: 120-150. f: 550-1650 kc.

I.F. Coils: 0.1 mm. diam. Q: 150-175. f: 455 kc.





A V.F.O. for Six Metres*

FLEXIBILITY FOR THE ROCKBOUND V.H.F. MAN

THOMAS BECKAGE, W3LCK

EVER since thousands of crystals in the range between 8350 and 8550 kc. were released on the surplus market some years ago the 6 metre band has had a series of pileups at 50.1, 50.25, 50.4 Mc. and so on up through the band. If you have wished for an inexpensive way to avoid being rockbound on these popular channels you may be interested in the v.f.o. described here. It is simple and economical to build, having been designed for the 6 metre job only.

CONSTRUCTION

A 5" x 6" x 2" chassis provides plenty of space for the v.f.o., and may even include a built-in power supply, if desired. Because of heat and vibration problems the power supply may introduce, it is recommended that the supply be made external to the v.f.o. It goes without saying that the power source should be well filtered. A small supply will suffice, as only 150 to 175 volts d.c. at 20 to 30 mA., and 6.3 volts a.c. at 0.3 amp. will be required. Small power transformers such as are commonly used in t.v. boosters and converters are ideal for this purpose. The full wave centre-tapped type is recommended.

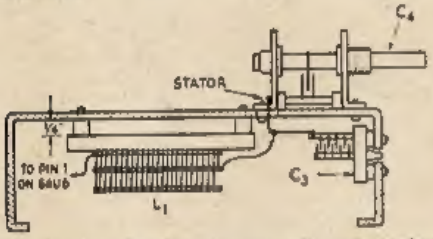


Fig. 1.—Arrangement of the coil and tuning capacitors in the 6 metre v.f.o. Be sure that the access hole in the front panel for C3 will not be covered after mounting the main tuning dail on C4.

Except for the mounting of L1, C3 and C4, there is nothing critical about the construction of the v.f.o. The coil, L1, is constructed by cementing a full length of B. & W. Miniductor No. 3007 to a block of polystyrene 1" x 3" x ¼" in size. Use a good quality coil dope. Clamp the coil in place with one rib in contact with the block. Flood the contact area with cement and allow it to dry. Then repeat the application of cement and allow the assembly to dry overnight. Drill the ends of the block for mounting, as shown in Fig. 1. Connection to the coil should be made by unwinding a portion of the coil at either end, to get enough wire for the leads.

CIRCUIT

As may be seen from Fig. 2, the v.f.o. circuit is about as simple as it can be and still do the job. The popular series-tuned Colpitts circuit is used, with the grid of the 6AU6 oscillator on 12.5 Mc. to 13.5 Mc., for coverage of the band. The plate circuit is on 25 Mc. The v.f.o. is intended for use with transmitters in which the first stage is an oscillator-tripler for 8 Mc. crystals. The coupling method shown converts the first stage to a straight-through amplifier on 25 Mc., so a 4,700 ohm swamping resistor is placed across L2 to minimise the tendency to spurious oscillation in this stage. The resistive loading also broadens the response of the oscillator, so that one setting of the slug in L2 will suffice for coverage of the first megacycle of the band.

The output cable used is RG-62/U. Other types of cable can be used, but variations in capacitance may make a change in the number of turns in L2 necessary. The outer conductor of the cable should not be relied on for a bond between the transmitter and the v.f.o. Use a separate piece of copper braid or strap to bond the two together, and make it as short and direct as possible.

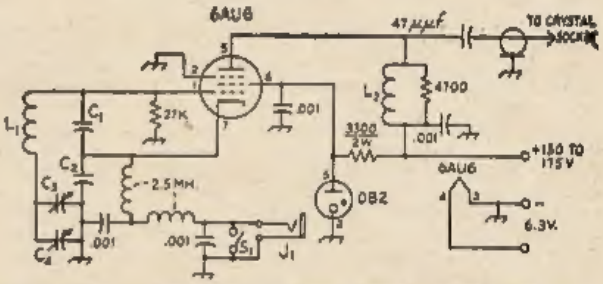


Fig. 2.—Schematic diagram and parts information for the 6 metre v.f.o. Capacitors other than C1-4 are ceramic. Resistors ½ watt unless specified.

C1, C2—300 pF. temperature compensating capacitor.
C3—50 pF. trimmer.
C4—20 pF. variable, double-bearing.
J1—Open-circuit jack.
L1—32 turns of No. 20 tinned, ⅝ inch diam., 2 inches long. See text.
L2—16 turns No. 20 enamel on ⅜ inch iron-slug former.
S1—S.p.s.t. toggle switch.

ADJUSTMENT

After wiring is completed and checked, apply power to the v.f.o. The regulator tube should ignite, and current through it will be about 10 to 15 mA. Next measure the voltage developed at the 6AU6 grid, using a vacuum tube voltmeter, or volt-ohmmeter of the 20,000 ohms-per-volt type. Negative voltage developed on the 6AU6 grid shows that the tube is oscillating. It should be about 5 volts.

Set the main tuning capacitor, C4, to near maximum capacitance, and by adjusting C3 bring the frequency of oscillation to 12.5 Mc. This can be checked at that frequency, if a receiver is available for tuning in that range; otherwise listen for it at 25.0 or 50 Mc. Be sure that the signal being checked is at the right frequency, and that you are not listening to an image or other spurious beat. A cross-check with a calibrated absorption-type wavemeter is desirable here. The note, as monitored with the receiver beat oscillator on, should be stable and free of a.c. modulation. The tuning range of C4 may now be checked by following the frequency change with the receiver. With the capacitor value given for C4 the range will be about four megacycles at 50 Mc. If greater tuning range is wanted, use a larger capacitor for C4. For a smaller tuning range, remove one plate from C4, and use slightly more capacitance in the padder, C3.

If initial checks are made with the v.f.o. before it is mounted in its case, a slight readjustment may be necessary when it is boxed in. Allow 15 to 20 minutes for warm up before making final frequency adjustments.

With a 26 inch length of RG-62/U cable connected between the output of the v.f.o. and the crystal socket of the transmitter, peak the slug in L2 for maximum output from the driven stage. If a peak cannot be reached with the slug, turns will have to be added to or removed from L2.

Though a jack is shown in the cathode lead, keying of the transmitter will probably be done in a later stage. V.h.f. transmitters seldom employ oscillator keying, as break-in operation is not often used in 50 Mc. work. If the plate supply to the oscillator is not turned off with the rest of the transmitter, a key or the spotting switch may be useful when a station on one's own frequency is being worked. The control may, of course, be handled with a remote switch or relay.

Any type of metal cabinet can be used to house the v.f.o. The tuning dial may be any vernier type that has sufficient tension to prevent the frequency from being altered by brushing past the control knob. Any of the three different sizes of imported vernier mechanisms now available at moderate cost will do nicely.

About six of these units have been built recently in this locality (Northern Pennsylvania), all with satisfactory results. The only troubles that have developed were due to wiring errors, or to marked lack of attention to mechanical considerations in the mounting of the frequency-determining components.

* Reprinted from "QST," June, 1959.

GROWING PAINS . . . S.W.L. VARIETY

THE Short Wave Listeners are an essential part of the Amateur Radio set-up in this or any other country. But there are many Amateurs who don't even acknowledge our existence. These words seem familiar, so they should, for I wrote them in a letter to "A.R." many months ago. Several weeks ago I overheard a remark on 40 metres, by a prominent Amateur, to the effect that he for one wanted nothing to do with listeners, either in person or in the form of a report. This set me thinking, and there and then I decided that something must be done to rectify this state of affairs which has, unfortunately, been in existence for far too long.

It was decided to contact a dozen Amateurs of varied professions, varied radio interests, and a similar number of listeners in an effort to obtain their views on the matter. This was done, and this article is compiled from those opinions, together with my own comments, trusting that a perusal of these lines will assist those who are at fault whether they be Listener or Amateur. And above all I trust that it will do something towards restoration of harmony in the fraternity.

Now, all things must begin somewhere, and it is the misfortune of the Listeners that this unenviable stage is of necessity connected with our section of the movement. Take the newcomer to radio as a hobby (and in this case I refer to the youngster not yet left school). He goes through the crystal set stage and slowly progresses until he, by design or accident, receives Amateur signals. He hears about QSL cards, which are to be had for the sending of a report and there it starts. Out go letters designed only to extract a card, not endeavouring to give the station a report of any value. The result is that over a period of years stations, particularly the very active DX men, get snowed under with worthless reports—thus is bred the ill-feeling which is so prominent these days.

I realise this sounds rather far fetched, but it has happened before and will happen again. Amateurs become annoyed, Listeners exasperated. Some reports which are sent out would have to be seen to be believed, for instance one shining example was sent to a prominent Amateur some time back. It went something like this, "Heard you on the air last night, please send me your card." It is to be said for this very fine gentleman that he did send the card, he verifies all reports regardless. He considers it common courtesy, besides encouraging the prospective Amateur along his preliminary path.

These remarks don't apply solely to the young lads. I for one did the same thing, and not very long ago. I sent out my first thousand cards without a lot of thought, and was quite annoyed at the very poor response received. Fortunately the VK2 QSL Manager drew my attention to it and since adopting his suggestions my percentage has increased steadily.

From the general tone of letters I have received on the subject and from personal conversations I have had with different Amateurs, it would seem that a very large portion of the blame is not with the Amateurs who don't answer reports—although there can be no excuse for the fellow who ignores receipt of a stamped envelope—but with we listeners who are sending out worthless reports. The subject of reporting won't be entered into in this article, but a composite article, embodying comments of many Listeners and Amateurs, is at the moment being compiled by the writer and will be submitted to "A.R." in the near future.

However, it is suggested that the various radio clubs, s.w.l. groups and what have you, apply a programme of education on the subject of reporting to all Listeners under their care, teaching them all facets of reporting and all matters pertaining to this, a most essential part of our hobby. By doing this, it will raise the standard of s.w.l.-ing in this country to the extent that we will be appreciated far more than we are now. Even if we can't change the opinions of the Amateurs who are against us, we can at least make them sit up and take notice.

How are we going to do this? Well here are a few simple rules gathered from far and wide, but regardless of their origin, if applied to our activities they will do a lot to assist our cause. Firstly, think before sending out a report. Have we given all the possible details? A full report must not stop with the date, time, band, RST, etc. Reporting is not as simple as that. I won't go into details here, I shall include them all in the second article. But remember the more details you give in the report, the more it will be appreciated and the greater the chance you have of getting a return card. Of course many stations don't QSL even to other Amateurs, in which case there is no hope for us, the humble Listener.

". . . Antenna here is a long Yagi. I'm beaming in your direction . . ."

Having got to the stage of noting all the details for the report, we must then decide if the report will be of any use to the chap whom you have just logged. If the report deals with a contact he has had with somebody in our locality, then be sure that the report is of little value to him. This applies more so to the DX man who under normal conditions works into our State. If propagation conditions are against him working in to our locality, then he most likely will be interested in our report.

When dealing with our local chaps, make sure before a report is sent that he is getting into your locality when all is against it. And above all, don't fail to report any unnatural condition connected with his transmission, for a critical report, provided the criticism is accurate, is of more value than a straight 5 by 9 to the transmitter. As far as I am concerned, I send cards only to VK mobiles, portables or any lower-powered distant stations. However, I occasionally want a particular card, in which case I send a stamped addressed envelope. In doing so, I have had the misfortune to discover that a few of our Amateurs are philatelists specialising in uncancelled current Australian issues.

Having decided to whom we send our card and the nature of the report, we are then faced with the task of deciding how we are to forward it. Should we want to send it direct we must enclose either a S.A.E., or in the case of overseas stations, an I.R.C., obtainable at the post office, and exchangeable in most countries for a stamp. Don't send reports direct without the return postage. Costs of running a station are high, but to the DX men and a lot of our non DX chaps, QSL cards and postage costs far exceed the running costs of their station, so don't be annoyed if they don't send you a card.

Then of course there is the Bureau, without the aid of which we just could not get our cards out without a terrific postage bill, so we send most of our DX cards via this medium, also cards for VK city members who collect their cards from the Bureau. The country chaps are in a different position; although their cards are posted to them from the Bureau, they have to get their returns back there, and in cases of some not too active chaps, this requires postage of single cards.

Whilst on the subject of costs, I would like to quote a very prominent DX man who is faced with the problem of keeping up with s.w.l. cards. "How nice it would be if cards could be exchanged, but s.w.l. cards become an embarrassment as to cost with a lot of Amateurs. In my case it costs me more to send QSLs than to run my station. Now if all Amateurs answered s.w.l's. the numbers would grow into a flood and finally make it impossible to keep up with them, no matter what your feelings in the matter. I know, because I was faced with the problem a few years ago. I now get about 100 Listener reports every year and answer every one. If it were not for the Bur-

eau, I would have to give up QSLing altogether, as I now send out about 2,000 cards every year. I do not QSL direct unless a coupon is sent; I could not afford it. QSLing can get out of hand, whether it be Amateur or Listener. I think that the person who makes a habit of collecting cards should be prepared to meet the cost." I think those opinions could be safely applied to most of the Amateurs, DX or otherwise.

As regards Listeners in general, popular opinion has it that we are a flock of embryo Hams, but this is far from being true. The fact is that listening is a study in itself, and the genuine Listener is a specialist in his own right. Who would deny that WIA-L3042, better known to the world as BERS-195, and whose name is near the top of QSL ladders the world over; G/7187 and W1/7959, both of whom have over 250 countries verified, are not specialists? You will say they are exceptions, well I can assure you they are only a few of the s.w.l's. in the world who have their s.w.l. equivalent of the DXCC and are well over half way towards the second one. These chaps are experienced Listeners who can hold their own with most operators, and given this experience we can all emulate their feats.

I emphasise that experience is a must; given time and practice, we can all become specialists in this field, then if and when we get our tickets we have the advantage over the chap who comes in as a technician. Many of the present day Listeners have no intention of ever going on the air, but a lot will —most of these being younger members who even at this stage are building their own gear. Their technical knowledge is fairly high and there is little doubt that they will get on the air when they are old enough. In the meantime it is up to those who are guiding them to teach them the finer points of operating procedure and reporting.

From the Listeners' point of view, the main worry seems to be the lack of appreciation of our efforts, which in my opinion is largely due to lack of publicity. Fortunately the publicity for VK2 and VK3 S.w.l. Groups is in capable hands and you can be sure that in the future you will hear a lot about the listeners in those Divisions. Other States would do well to follow these two progressive Groups. Most Listeners have nothing but praise for the Amateurs with whom they have had dealings, but they feel that there is an undercurrent of intolerance throughout the Amateur world. As I have endeavoured to point out, it is up to us as Listeners to do our job properly, and thus remove any cause for ill feeling towards us. As to the Amateurs who criticise those of us who are remaining s.w.l's., let them remember that it is up to the individual to choose the branch of radio which suits him, his education and his pocket.

Co-operation exists between the VK2 and VK3 Groups in a manner which may surprise many of the readers. The two very active Secretaries, myself and other members are in touch by letter or tape regularly, letters crossing sometimes two and three times a week on matters of common interest. Each Division is running their own contests, whilst the N.S.W. Group have their own bulletin. Other Divisions can do the same, all they need is a little guidance from experienced Listeners or former Listeners (see Editorial, "A.R.," Nov. '57), and some fresh ideas with a committee willing to put them into action. Increased activity was shown in the Listeners' Section of the R.D. for 1959, 48 entries were received, which is an increase of 11 on 1958. As well as this, 18 of the 1958 entries were absent from the 1959 event.

In conclusion I would like to thank the Publications Committee on behalf of all s.w.l's. for the help they have given us, and for the additional space they have allotted to us. I would ask the individual Listener to respond by forwarding all information for publication in our column to either myself or Maurie, ensuring that the page is kept full.

"I would like to direct these closing remarks to every s.w.l. in Australia," comments Tim Mills, Secretary of the VK2 S.w.l. Group. "I know it is hard to run a S.w.l. Group, but we want your help to fill the gap in this section of our hobby. If there isn't a Group in your State, or if it is at a standstill, then it is your duty as a s.w.l. to correct it. Check with full members and the Council of your Division, work with them, and I am sure they will work for you. Every S.w.l. Group must work with each other for we are all part of the W.I.A."

—D. Grantley, WIA-L3022
Spring Valley, Holbrook, N.S.W.

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A Foolproof S Meter*

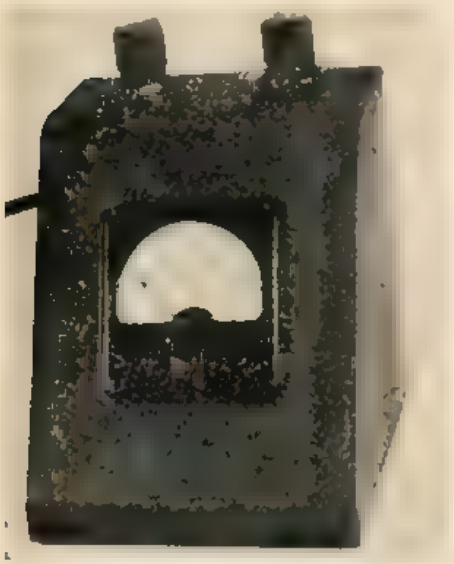
AUXILIARY UNIT FOR SURPLUS AND OTHER RECEIVERS

H. O. LORENZEN, W3BLC

• Owners of surplus receivers and other receivers not equipped with signal-strength meters will be interested in this S meter unit. It is simple, easy to install and universally adaptable.

OVER the years I have tried many S meter circuits without very gratifying results. Some of the circuits resulted in the meter reading backwards, while others compressed the scale all in one short part of the meter's reading range Most of these circuits used the usual 1 mA. meter in some form of a bridge circuit in the plate of a pentode.

This S meter uses the simple circuit shown in Fig. 1. It is the essence of simplicity and yet it has many features to make it foolproof for any application. By using a 0-200 microammeter (readily available from surplus), a better range of sensitivity is achieved over those circuits using a 0-1 milliammeter. R1 allows for a zero adjustment of the S meter to compensate for different levels of circuit noise



The S meter is built into a sloping panel cabinet, with the controls at the top. The one at the left is for R1. The skirted-knob at the right is for R2.

Some receivers have gain-adjusting circuits which have a major influence on the residual noise level in the a.v.c. circuit, but the adjustment of R1 permits compensation for these varying noise levels. The a.v.c. level control, R2, also permits the matching of the meter scale to the a.v.c. voltage.

When a converter or an extra r.f. stage is used ahead of any of the conventional S meter circuits, the scale no longer reads correctly. Not so with this circuit. All that is required is a simple readjustment of the a.v.c. level control R2 and the S meter again reads correctly

A photograph shows the calibration scale on the 0-200 microammeter Adequate spread is provided for the lower S units, but likewise, the scale also accommodates readings up to 20 db. over 9. Beyond this I feel the reading is unimportant.

R3 and R4 in the cathodes of the 6SN7 are not critical but probably ought to be 10 per cent. resistors so R1 will balance near the centre of its range.

The B+ lead shown was connected to the screen supply on my BC348 which provided 125 volts. This gave about the right sensitivity. The same voltage could be obtained from a simple voltage divider across the plate supply with the 6SN7 plates tied to the centre point of the two resistors.

A photograph shows the meter mounted in a conventional sloping-front meter cabinet. As shown in the rear view, all the components are mounted on a 1/16 inch aluminium bracket which fits the back opening in the sloping panel cabinet. This aluminium bracket is held in the cabinet by the two extra nuts on the potentiometers. R1 is shown on the right with R3 and R4 mounted between the two end terminals and two phenolic stand-off bushings. The socket for the 6SN7 is mounted on two bushings slipped over mounting screws which support the socket from the base.

R2 has a pointer knob on it so it can be set to the correct value and marked for the various converter or receiver combinations. Wires for the power and a.v.c. connections are formed into a cable terminated with a 4-prong Jones plug Shielded wire should be used for the a.v.c. connection. A covering of black vinyl tubing gives the cable a professional finished look. By providing matching sockets for the cable plug, the S meter can be used on more than one receiver combination Later I plan to use it on a Command receiver, Q5-er, also.

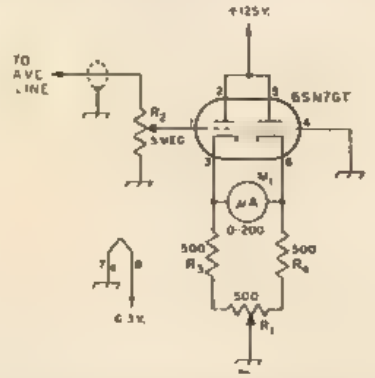
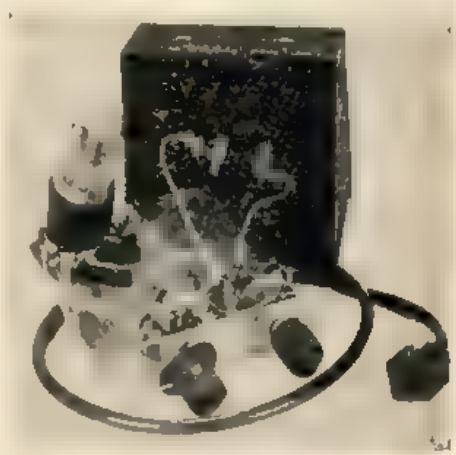


Fig. 1.—Circuit of the foolproof S meter Resistances are in ohms and fixed resistors are ½ watt. R1 and R2 are potentiometers. M1 is a 0-200 d.c. microammeter R3 and R4 preferably should have 10% tolerance ratings.

Operation of this unit has been extremely gratifying. After trying lots of circuits that required cutting and trying to get them to work suitably, I must report this unit worked the first time. It hasn't been necessary to make any modifications either. Calibration of the unit was arrived at by using the comparison method with two of the more reputable commercial receivers equipped with S meters. The two receivers didn't match each other when the S meters were compared on the air. However, by adjusting R2, the a.v.c. level control, I could match the scale of either one extremely closely. That's the advantage of the controls. So, if you have been searching for a foolproof S meter circuit, I can't see how you could possibly go wrong using this one. I am sure some of the fellows using BC348s, BC342s and other combinations will appreciate this extremely versatile S meter circuit.



Interior view of the S meter showing the mounting of the 6SN7GT and the potentiometers R1 and R2.

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FRENCH CONTEST FOR 1960

The 1960 French Contest will be held as follows:

C.w., from 1300 GMT on Feb. 27 to 2100 GMT on 28th Feb. Phone, from 1300 GMT on April 9 to 2100 GMT on 10th April.

Contest exchanges will be as for the R.D. Contest (e.g. 579001 for c.w., and 57001 for phone) and increasing by one for each successive contact.

Scoring will be three points per contact. There will be no multiplier

All logs must be forwarded within one month of the Contest to R.E.F., B.P. 42-01, Paris R.P., France. These logs are available for reference to any French Award. QSLs are not required for these QSOs.

Reprinted from "QST," December, 1959.

SOME ABC's OF AMPLIFIERS*

ASK the average Radio Amateur or aboveaverage Electronic Technician to define a Class A, a Class B, and a Class C vacuum-tube amplifier stage and note his answer. In all probability it'll be this: "A Class A stage is one in which the tube is biased to the straight part of its Ec Ib curve; it doesn't draw grid current." "A Class B stage is one in which the tube is biased to cut-off; it draws some grid current." "A Class C stage is one in which the tube is biased to twice cut-off; it draws heavy grid current." Nothing wrong with this . . . as far as it goes.

Press him further, and you may pry out a few more facts. For instance, that a Class A stage often is used as a voltage amplifier; that, in r.f., a Class B stage can be used to amplify amplitude-modulated signals; that a Class C stage can be plate-modulated. Still correct, but still missing the point.

All these things are either examples of what these three classes of amplifiers can do or examples of the manipulations of stage parameters made in an effort to attain the desired status of operation.

Let's pause a moment and note the actual definitions of these classes of operation:

Class A: An amplifier stage in which the output waveform is identical to the input waveform.

Class B: An amplifier in which the power output varies as the square of the input voltage.

Class C: An amplifier in which the plate current rises in exact proportion to an increase in plate voltage.

With these definitions in mind, let's take them one by one and examine their capabilities and their limitations. For the sake of simplification, we shall confine ourselves entirely to radio-frequency applications.

Class A stages have been treated with such thoroughness by the technical press that little needs be said about them. Just keep in mind that their r.f. applications are determined by the same limitations and capabilities as their a.f. applications. Then all you need to do is to read any of the many articles written for audiophiles.

Class B stages are quite another matter. Not too much factual information on this is available unless one digs it out, piecemeal, from a number of engineering manuals. First, let's ask ourselves why should a person desire a stage in which the power output varied with the square of the input voltage? Is the Class B stage something painstakingly designed to perform some desired function? The answer is an emphatic "Yes." The true Class B r.f. stage was designed with one thought in mind: To produce an efficient (relatively-speaking) stage capable of amplifying an amplitude-modulated signal.

Being a vacuum tube, the stage's r.f. power generator primarily is a voltage-operated device; therefore, one approaches the design problem with the consideration of having a voltage available to actuate the tube's grid. The amplitude of this voltage varies in accordance with the signal intelligence superimposed on the original carrier wave. Now let's start to nail down some of the things we must have in order to enable the stage to operate in the manner to satisfy our rigorous stipulated requirements. **Number one:** All voltages associated with the control grid must be of a "stiff" nature; that is, the voltages must not fall off if they are required to deliver power (sustain a current flow). Note that this requirement applies equally to both signal and bias voltages. Remember that the tube is biased (by an external voltage or by the tube's internal geometry design) to a condition approaching cut-off. Thus when signal voltage is applied, the plate current will increase. Let's mark down **number two:** The voltages associated with the plate (also the screen-grid and the suppressor-grid, where applicable) d.c. supply must be of a "stiff" nature.

We have seen that the plate **current** increases when a signal voltage is applied to the control-grid. We need, however, an increase in plate r.f. **power** . . . an increase related to the square of the grid voltage increase. Furthermore, this r.f. **power** must be developed from a constant-voltage plate power d.c. source. That leaves us with but two variables in the plate circuit (assuming "tank" losses to remain constant): The plate current and the vacuum tube "conversion efficiency." That latter term refers to the tube's ability to convert d.c. plate power input into r.f. plate power output. Happily, these two variables can be made to complement one another in such a manner as to achieve the desired results. Very roughly, it is somewhat like this: The tube functions as a very inefficient d.c. power converter at low r.f. grid voltages, and plate r.f. current variations are small, too; at high r.f. grid voltage the tube's conversion efficiency increases, and its plate r.f. current variations are large. By extremely careful adjustment of bias, r.f. grid excitation (which must be light), and plate loading (very heavy plate loading is required), a condition can be achieved in which the plate r.f. power output varies with the square of the control-grid r.f. voltage input

Note that these three variables (bias, excitation, and loading) are all interdependent one upon another. In other words, when you adjust a Class B stage, you are solving a problem with three variables! Small wonder that so few are adjusted correctly, for unless you have rather extensive (and decidedly expensive) test equipment, you do not have an "answer book" to tell you when you have reached the correct solution.

Class C stages have been treated rather thoroughly in the technical literature. Much of the material, however, deals with telling **how** to adjust a stage, rather than **why**. Let's go back to the definition: Plate current varies directly with plate voltage. This, again, suggests that some very definite applications were in mind when such requirements were stipulated. Such is the case, this is the condition that permits plate modulation.

A review of some of the operational requirements is in order. Briefly, they are these:

1. High control-grid bias, preferable cut-off bias from a fixed source and additional bias to at least twice cut-off from "grid-leak" bias.
2. Sufficient r.f. excitation to drive the tube well into plate saturation.
3. A "stiff" plate d.c. power source.
4. A vacuum tube with very ample cathode emission (not a small tube worked to the limits of its capabilities).
5. Relatively-light plate loading.

Why? A good reason in each case. The bias stipulated permits the tube to work at high efficiency and to adjust its bias instantaneously to varying requirements necessitated by the rapid variations of plate source voltage. The appallingly-high r.f. excitation requirement is necessitated by exactly the same conditions: efficiency and varying plate source voltage. It is quite obvious that to sustain undiminished output, more grid drive is required for high plate source voltage than for low. As the plate power source will have to supply twice its "resting" current at its peak demands, it'll have to be designed to supply such current without a drop in voltage. The ample cathode-emission and the light plate loading go hand-in-hand. The tube must be capable of supplying **four** times its normal (or "resting") r.f. power on peaks. It must not be anywhere near overworked under carrier-only conditions; otherwise, it'll never meet the peak load requirements.

Now, **why** this "four times power" stipulation? Why must the plate current increase in exact pace with plate voltage? Let's consider the classical case. Assume a final amplifier with 1,000 volts on its plate; have it draw 0.1 ampere under normal (light) loading. Now, in series with the d.c. power supply, place an alternator of 707 r.m.s. (1,000 peak) volt output. With the alternator inactive, the stage will draw 100 watts input. Assume 60% efficiency; then there will be 60 watts r.f. power output . . . all pure carrier. Let's start the alternator and consider it as it generates a quarter-cycle (positive-going on initial half-cycle) of voltage. The total plate source voltage on the tube will rise from 1,000 to 2,000 volts. If the other requirements have been met, the plate current will rise from 0.1 to 0.2 amperes. Thus the total plate power input will have risen from 100 watts to 400 watts.

The reader is referred to any of the many texts which explain in detail the division of this power into carrier and sidebands, and which portion is supplied by the modulator (alternator) and which by the d.c. power supply. Briefly, averaged over a full cycle of a sine-wave the alternator will have to supply 50% as much power as the d.c. power supply. This adds up to 150 watts aver-

(Continued on Page 11)

* Reprinted from "CQ," September, 1959.

TECHNICAL TOPICS

TUNING

LET us consider the tuning of a receiver to a c.w. signal on 7100 kc The receiver has a single intermediate frequency of 500 kc., then as the front end of the receiver tunes to 7100 kc. the oscillator tunes to 7600 kc. and the difference frequency, 500 kc., is fed into the intermediate frequency amplifier. The beat frequency oscillator is tuned to 501 kc. and a 1 kc. note is heard in the speaker.

Now suppose the receiver is tuned from 7095 kc. to 7105 kc. The oscillator will then tune from 7595 kc. to 7605 kc. and the difference frequency produced with the 7100 kc. signal will feed into the i.f. amplifier at 495 to 505 kc., and as the dial is turned the audible note will (if the i.f. channel is broad enough) start at 6 kc., go down to zero beat at 7101 kc. on the dial, and then rise again to 4 kc. at 7105.

Note that the signal frequency is changed to a frequency which varies on tuning from 495 kc. to 505 kc. in the i.f. stages and that the signal can be brought to zero beat either by tuning the main signal or by tuning the beat frequency oscillator.

If our i.f. amplifier is highly selective and passes a band of frequencies only 2 kc. wide., that is from 499 to 501 kc., then we will first hear the signal when the oscillator tunes to 7599 kc. when the pitch of the note will be 2 kc. and it will disappear when the oscillator tunes to 7601 kc., at which stage the audible note will be zero frequency. Thus with this selective i.f. section, there will be no signal on the other side of zero beat.

In the early days of superheterodyne receivers this was known as "single signal" reception. Obviously the range of the audible note as we tune through a c.w. signal gives us a measure of the selectivity of our receiver.

Now let us consider tuning an a.m. signal on 7100 kc. If the modulator supplies to the transmitter an audio frequency ranging from 200 cycles to 4 kc., then the transmitted signal will consist of the carrier, 7100 kc., plus the sidebands due to the sum and difference frequencies, 7100.2 to 7104 kc. upper, and 7096 to 7099.8 lower sideband. If our i.f. channel is 8 kc. wide, then we can tune our oscillator to 7600 kc. and pass the carrier and both sidebands through the i.f. amplifier. If the i.f. passes a band only 4 kc. wide, the same tuning will pass the carrier and 200 cycles to 2 kc. of each sideband, but if, however, we centre the tuning in say the upper sideband at 7102 kc. or slightly less, we can pass the carrier and the whole of the upper sideband. If the i.f channel is more selective, it will obviously restrict the range of audio frequencies that we can receive.

The single sideband suppressed carrier (s.s.b.s.c.) signal, as its name suggests, is the same as an a.m. signal which has had one sideband and the carrier removed and the remaining sideband only is transmitted. To make this signal intelligible, the receiver has to generate and supply the carrier.

If we take the upper sideband, 7100.2 to 7104 kc., of the previously mentioned a.m. case as our s.s.b.s.c. signal, then we can make this intelligible by supplying a carrier at 7100 kc This would require a separate oscillator such as our v.f.o. which would have to be tuned for each signal so that it is usual to supply the carrier of the intermediate frequency (500 kc. in this case) by using the c.w. beat note frequency oscillator to generate it.

Just as in the case of bringing the c.w. signal to zero beat the close tuning to get the correct relationship between the signal and the inserted carrier can be done by tuning either the b.f.o. or the main tuning dial provided the one not used is correctly set. The carrier must be inserted with an accuracy of not less than 10 cycles and thus for s.s.b.s.c. working a receiver requires very stable oscillators for both converter and b.f.o. and a very slow tuning rate bath or main tuning and b.f.o.

—J.A.G.

SOME ABC's OF AMPLIFIERS

(Continued from Page 10)

age input; at 60% efficiency, 90 watts output, of which 60 watts remains pure carrier and 30 watts constitute "sidebands." This meets the requirements for 100% modulation by a sine-wave.

If for any reason all the stipulated requirements are not met . . . if the r.f. drive is low, if the regulation of the plate power supply is poor, etc., the envelope of the output r.f. power will not follow the modulating sine-wave but will be "flat-topped"

It can be shown that any departure from a sine-wave can be represented by a sine-wave plus harmonics. "Flat-topping," being a process of distorting a sine-wave, produces harmonics of the modulating frequency, a practice that calls upon its perpetrator the wrath of both the R.I. and his fellow Amateurs. These latter two paragraphs are addressed to those misguided souls who reduce r.f. drive to plate-modulated finals in order to reduce the generation of r.f. harmonics . . . and thereby generate a beautiful crop of non-filterable a.f. harmonics that splatter across a whole band.

To sum it all up in a few words: An amplifier is not a Class A stage unless its output waveform is identical to its input waveform. It is not a Class B stage unless its r.f. power output varies with the square of the r.f. grid voltage. It is not Class C unless the plate current varies directly with the plate voltage. Forget about definitions involving bias, drive, and loading; they are but tools to reach an end.

BOMBER USED FOR T.V. TESTS

A Lincoln bomber, flying at 5,000 feet, was used as a giant mirror in Townsville on 7/1/60 to reflect television signals from Adelaide down to earth.

It was taking part in a unique experiment to establish why very high frequency radio signals can be picked up on occasions long distances from the sending point.

The experiment was controlled by the District Radio Inspector (Mr. Col King) on behalf of the Ionospheric Prediction Service.

The Lincoln was used to test a theory that reception of long distance signals improves when an aircraft is flying over the receiving set.

Mr. King said it had been found that when aircraft was flying a straight level course over the receiving set, the signals improved.

When it banked, the signals weakened and caused what is known as "aircraft flutter."

"This was commonly experienced by television viewers," Mr. King said.

The Lincoln had flown at heights between 2,000 and 5,000 feet, Mr. King said. At 5,000 feet it had caused the strongest signals.

The signals used were a test pattern from Adelaide station, Channel 2, ABS. They were picked upon a set at Mt. Stuart, in the suburb of Aitkenvale.

It appeared that the signals were being channeled through the upper atmosphere at about 5,000 feet above the city, Mr. King said.

The experiment had not been absolutely conclusive, he said, and more tests will be conducted when an aircraft was available.

Using the principle of the plane acting as a reflector to beam the signals down to earth, it was possible in the future that a satellite could be used to relay television programmes from stations thousands of miles away to local t.v. sets, Mr. King said.

The satellite would travel at the same speed as the earth, remaining in a constant position and reflecting the signals to the ground.

—Townsville-Dalby Bulletin.

Publicity Corner—*

Don't Be Shy About It!

JOE A. ROLF, K5JOK

PUBLICITY HOUND seems to be a pretty common term in many Ham circles. So common, in fact, that anyone sending out a QSL with even a remote resemblance of his beautiful mug is liable to earn the title. However, the unlaudable description falls much quicker upon the local Ham whose call is presented over mass media. Amateur Radio seemingly has retreated to the confines of a few precariously held kilocycles, and anyone departing from the bedlam to do a little bragging has a pretty good chance of being plastered with the publicity sticker. Hams have become, of all possible things, publicity shy!

This charge may be challenged as being untrue and unwarranted, but one has only to do a little rag-chewing to find that he isn't the only one to be misunderstood by neighbors, police, congressmen, mayors, dog catchers, welfare officers, and XYLs. Nor does one have to conduct an extensive survey outside the circle of immediate acquaintances to determine what his community knows about Ham Radio.

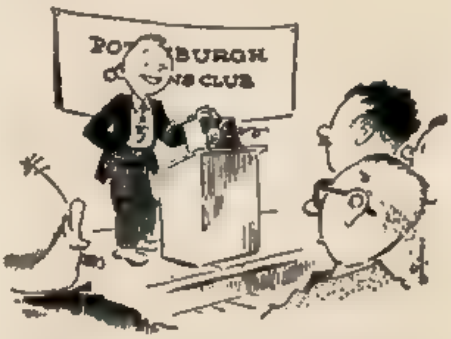
For instance, it is well known publicly that the hobby sometimes provides emergency communications during disaster (a fact often quickly forgotten with a little sunshine); that Hams meet in nets to prepare for such emergencies (though nothing ever seems to come from these apparent social gatherings); and that they occasionally have success in sending garbled messages to such remote places as the North Pole. More often, the average Ham is known as the arch-villian, by popular vote, of Channel 1 through 28; a joker who enjoys living dangerously in a junked-up basement, with the spider agility to cover a nice neighborhood with wire in nothing flat. During sunspot cycles, he is even known to become vicious, shouting at everybody's kids and leaving his wife.

Whether the above assertions are true or not, even to the belief of solar lunacy, they are typical negative attitudes existing in many localities. They exist, mainly because the real cause of Ham Radio has not been made sufficiently clear. For the same reason, the really significant aspects of the hobby are seldom known.

Today, Ham Radio's vastly improved technology and ability to render a superior public service doesn't often demand the limelight of the front pages, or the attention of a learned scientific convention, as in the Golden Age before Pearl Harbor. The almost hidden role of modern Amateur Radio, now reaching through the ionosphere, is not so widely publicised as in the days when the hobby was reaching for Europe. This does not mean that national publicity is non-existent, or fails to meet a definite need, but that the real burden of publicity at the local level has fallen upon the individual.

And why you? For one reason, you're a Ham. For another, you're not the same kind of Ham as the fellow out on the coast who won the Such-And-Such Award last year. Everybody read about his work during Hurricane Elmira and everybody was impressed. You felt good, yourself, when you read about it. The hero was a fellow hobbyist, and you understood his problems. It could have been you . . . sitting there in the darkness, fighting fatigue, hoping the long wire would hold during the 90 m.p.h. gale. You can picture our hero struggling, as you would have done, to pass his last bit of traffic before the water-cooled 6V6 disintegrated. This fellow, like you, is a credit to the hobby and everyone ought to love him and Ham Radio too.

Everyone does love him, but he's one in a thousand and you aren't even in the thousand that produced him. Not at all. Not with your rosy 813, beat up receiver, and antenna that's uprooting your neighbor's favorite sycamore. Besides, you're a scandal to the community when your rotor gets stuck. The other fellow never used such language (so the public thinks). He had new equipment, sat in an air conditioned office . . . even wore a grey flannel suit. The other fellow's achievement hasn't elevated you one kilocycle in the eyes of the public living within a second harmonic's throw. They know you and, like many of us, you may be pegged a real dirty-bird Ham.



What to do about it? Either prop up the sycamore and make a mad dash before the grey flannel market takes an upward spiral—or become a publicity hound. You don't have to be a big one; in fact, there is as much harm in being too publicity conscious as there is in not being publicity conscious at all. The important thing to remember is that Ham Radio is an important service to any community and that it's not illegal, though a lot of people think it is. Let the facts be known. Don't whisper, speak up!

Publicity can be grouped, like anything else, into two categories—good and bad. Both are easy to come by, but good publicity can only come about by being a good Ham and letting the good points come to light at the right time, by knowing something about the hobby and telling people about what you know

It's hardly likely, for example, that any good publicity can come from a rig which tears up every t.v. within four blocks. But then, even good Hams with good rigs have some trouble. If the mess can't be cleaned up, there should at least be an attempt at compromise. Many Hams don't compromise, but consider the F.C.C. as a complaint department for all misdemeanors. It's the easy way out—that is, until the Commission receives so many complaints it decides to allocate only the infra-red region for Amateur use. The problem which can't be solved with a solder-iron is best solved first hand, rather than by letting the government try it through the mail. People aren't too hard to handle. Recent Handbooks have complete sections dealing with both technical and public-relations aspects of t.v.i. This material is easy to find too . . . it's the section with no grimy finger-prints or dog-eared pages.

Then too, there's small chance of becoming a full-fledged publicity hound if the rig won't stay on the air long enough to work the fellow across the street, let alone winning this year's Such-And-Such Award. And even if the rig does stay on longer, rag-chewing doesn't make as good publicity as the c.d. nets, traffic, instruction classes, and "Worked All ——" certificates we have to brag about. Believe it or not, these Ham activities are newsworthy, particularly in small communities where many papers have as much trouble collecting local news as we do collecting a new state on 220 Mc. Intelligent publicity releases can really put the spotlight on Ham Radio, and you too for a change.

Three years ago a druggist mentioned his Ham activities to a lady customer and within a week had an invitation to speak on the subject at the local luncheon club. Such was the interest that he has been giving lectures at the club every month since. He has not only won the reputation of being a local expert on Ham Radio, but also on Soviet industry, psycho-neurotic disturbances and medieval geography. He has spoken on "Life on the Gobi," passed out Ham literature like a magazine salesman at a Hamfest, and probably has an honorary membership by now.

Despite the prospect of free lunches, lecturing probably is impractical for most Hams. It does illustrate the fact, however, that the public is interested in the hobby and in what the average Ham has to say about it. Mention Ham Radio in conversation and there'll be three or four questions waiting for you. Answer them and everyone will gain.

How will everyone gain by being less shy? First, you stand the greatest chance to benefit. The fellow two doors down will be less likely to yell like murder when you put an occasional flutter on his t.v. with the kilowatt full-sail on ten. He'll probably be amazed that the harmonics haven't wilted his Yagi when he knows what you're doing and what you're doing it with. In fact, it wouldn't be a bad idea to let the fellow inspect the rig, even fish around in the innards for loose wires if he wants to. Tell him about the nets you meet, the traffic you handle, the DX you've hooked and you'll no longer be the community crackpot —even though you are a publicity hound.

Respecting the entire hobby, there have been ominous forecasts (particularly, in the recent requiems for eleven metres) of dogdays ahead for Ham Radio. This may well be so, unless Amateur Radio convinces the public that it is an active and necessary public utility, which it is. To be convinced the public must be told and the individual Ham can best tell the facts honestly. You're a Ham . . . don't be shy about it.

* Reprinted from "QST," June, 1959.

John C. Pinnell, VK2ZR
15 Summit Avenue,
Earlwood, N S W
Phone: UW 4243.

A fair amount of DX has been worked over the past few weeks but conditions have been very erratic. This time of the year for a few years back has yielded very good conditions and given many of us a few additional countries to add to our DXCC score. But this year more chasing and band changing was needed. Static has been very troublesome over several days at a time. The 14 Mc band was the most reliable, 21 Mc. poor, and 7 Mc. lost in the QRN most of the time. Thunderstorms have marred a lot of the operating time. Perhaps we are heading along a better course now for at the moment conditions are good.

The source of much of our DX information has unfortunately ceased, as Don W4KVX was burnt out late November and lost everything he used to produce the DX Bulletin. All he saved was the electric typewriter and the mailing list. The latest info. is that the W DX boys are rallying to the cause and seeing what can be done to get the magazine going again. The response has been really good. (2QL)

A new name on the DX horizon is the Yasme Foundation, a non profit organisation dedicated, according to its charter, to "the advancement of Amateur Radio as an educational medium, the promotion of international goodwill . . ." It will also "organise and conduct world wide and international expeditions". President of the Foundation is KV4AA, Vice-President W4QDZ, and Secretary W8EWS. Directors include W8GN, W9AC, W4TO, W4KCV, and VP2VB. A paper for monthly issue "The Yasme News," has been initiated. (2QL)

NEWS AND NOTES

If you need a QSL from ex-KT1DM, Tangier Zone, his present address is, Daniel McPeak, P O. Box 32, Gresham, Oregon.

Ex-ZD4CF is now in London, his call sign is G3NMU

Jers and Pat Nudson, I5GN, are still active on phone from Italian Somaliland.

There are two currently active stations in Laos, XW8AL and XW8AC, the latter is very active on 10 metre phone. XW8AI is now at Guadeloupe and should have his FG7 call by the time you read these notes.

Four new KC4 stations at the Antarctic; KC4USM on the U.S.S. Staten Island; KC4NSG on the S.S. Glacier; KC4USC, Marble Port; and KC4USX, a new land base. (VE3BWY)

CR5CA, Angola, is currently working 28 Mc. phone daily from 1700 to 1900z.

EA9AF, Spanish Guinea, has been off the air for some time due to heavy work schedules, but is now active on Sundays and Mondays.

Albania.—ZA1AL has been very active on 14 Mc. c.w., but according to reports he is a phony.

VP5AK, Jamaica, has been active on 21 Mc. phone and c.w. after 2000z.

Wilis Island is counted as a new country in the DXCC list. VK4IC operated from there around 1955.

VS9OM will be QRT from Oman by the time you read these notes. HI8BE has QRT. If you still need a card from him try W4BKZ/d. (2QL)

ET3CE was worked on both phone and c.w. WBZQF, who was operating this station at Addis Ababa (Box 385), claimed the prefix "ET3" was issued to the College of Engineering. (2AMB)

ACTIVITIES

3.5 Mc. C.w.

5AKN: LA8LF*, ZL1/2/3/4*.
L3022: K3EKO, W1WAL

7 Mc. C.w.

2AMB ET3CE*, VQ5GJ.
2QL* TI2CMF, HC4IE, KX6CO, HK7MM, KL7PI, KH6, KM6BV, UA0, JA, VE, W/K, VR2DA.
2ZR. W/K*, JA* (27 worked), UA0KDA*, UA0KKC*, UA1KIA*, G3MBN*, G4DQ*.

* Call signs and prefixes worked.
z zero time—GMT.

5AKN: JA1CIU*, many W/K*, VE7VP*, OZ4LP/MM* (off Perth), W/K, JA, DU7SV.
5YD ET3CE*, Gs*, GC2FMV*, G3I3EDU*, KH6DFG*, KH6VF*, OA4FM*, OH7NF*, OK-2BEK*, OQ5IG*, OZ4LP/MM* (at VS9), SM-7CQR*, TI2CMF*, JA1 to JA0*, UA9CU*, UA9FF*, VE2 to 7*, VQ2JZ*, VQ2JG*, VQ2W*, VQ3CF*, VQ4FK*, VQ4GQ*, 9M2FK*, VQ4CC*, VR1B*, VR2DK*, YV5DE*, ZE3JO*, ZE2KL*, ZE6JT* ZE6JE*, ZE6JI*, ZE2JW*, ZC3AF*, ZS4KG* ZS5SU*, ZS6R*
BERS-195 DM2ABL, EA2FB, ET2US, F8CV, FA8RJ, G3BST, HA5KBP, I1IZ, OK1KPA, OQ-5EH, SL6CV, SP8HU, UA0KAH, UA1KAG, UB5KBB, UC5BB, UC2KAA, UF6KFP, UH8AK, UL7HB, UJ8KAA, UO5IT, UQ2KBD, YO4KBJ, YU1JCD, ZS4LH, SP2RQ/MM.

7 Mc. Phone

2AMB VQ5GJ, ET3CE.

14 Mc. C.w.

2AGH FB8CE*, FB8ZZ*, EA8CG*, G3DQO*, HB9KO* HR1VB*, JZ0DA*, JZ0HA*, OZ3Y*, LA3SG P* PZ1AP*, UA0OK*, UC2KAR*, UL-7KAR*, UH8AK*, UJ8KAA*, SP9DF*, VE6AAE/SU* VS9OC* VU2KV*, VU2MS*, UM8KAA*, XW8AI*, YS1O*, ZC3AF*, ZC6IF/8*, ZL3VB*, 4S7NG* 9M2GE*.
2AMB* HL9TA*, KM6BW*, OA3D*, VK0RH*, VS4FC*, YS1O*, 4S7EC*, FA8RJ, JZ0DA, HC-1IE, SU1MS, VU2BK, VU3GE, VS1JW
2QL FB8CJ*, OQ5IG*, OX1AY*, UN1AE*, ZS6IF/P*, 5A1TP*, EA8CU, FI8AP, MP4TAF, [redacted]
2ZR* DJ4YK*, G3KP*, DU1SCS*, KZ5LC*, KZ5TD*, LU8NA*, ON4JZ*, ON4PX*, SM3BPT*, UA9KCK*, UA0JZ*, UA0KCK*, UA0RW*, VK0TF*.
2AKN CT1NT*, CX2BT*, DJ2KS*, G3MKK*, HC2IU*, I1HFS*, JAs*, KH6COB*, KC6TM*, KP4CC* KP4ACF* KR6GY*, KV4AA*, K6QPG/KW8* (YL), F3NB*, OZ1QM*, UA0s*, VE2IJ*, VE3CIO* VS1FZ*, VS1JW*, VU2SX*, DJ1FN*, DJ1VW*, CN8IT*, Z14BC* HA5KFR*, HA5DH*, HK1FT*, FJZU*, G3OF*, G2BY*, I1BAY*, KI-7AIZ* KG4AG*, LU4AQ*, OA3D*, OZ4FF*, OY1X* SP1BC*, SP9DT*, SM3BG*, SM7AIA*, UA9KAG*, UJ8KAA*, VQ1HE*, VQ6APB*, VU1CR*, VR2BK*, VS4FC*, YO5LY*, YU1TK*, 4X4RT
4DO* UA0s*, UH8KAA*, SV0WZ*, VS4FC*, 4X4DR*, OQ5BM, UR2DK.
5BS: CR7IZ* EA9AP*, FB8CI*, FB8CJ*, FM7WP*, DU6TY*, HC1JU*, KP4AZ*, KP4AK*, MP4BCV*, MP4TAF*, MP4BCU/AP*, OH8AK*, OD5LX*, OQ0CZ*, UJ8KAA*, UO5PK*, UI-8AK*, UO1DR*, VS9AZ*, VR3W*, VS5PM*, VS5MD*, VS4FC*, VS9AHM*, VS9OC*, VQ-9CF*, VU2XG*, VP4W1*, XZ2BB*, XZ2QM*, YA1AO*, ZB1FA*, ZC4GB*, 5A3CW*, ZB2A*, 4S7EC*, 9M2EG*
5RK JA6AFG*, UI8AP*, VS4FC*, 9M3GA*.
5RX CO8VS*, DL1CO*, KP4KD*, LZ1KDA*, LU4DM*, TI2CAH*, UB5KBA*, UA3KND*, UO5SA*, UQ2AJ*, VP4TR*, VQ3HV*, VS5PM*, YS1O*, ZE3JX*, 4S7EC*
L2022. LZ1KBA, TI2CAH, VO2RC, UB5KBF, YA1AO.
L3065: ZL4CK, ZL4LB, VK0CC, KH6DMP, VK9XK, KA2KS, KG4AIG.
BERS-195: MP4BCU/AP, CN2BK, CN8CC, CR9AH, BV1US, DU1OR, EA6AE, ET2US, MP4BCU EP, FA2HL, FB8XX, FK8AI, GC2FZC, HZ1AB, JZ0HA, KG4AL, KM6BW, KZ5LC, MP4BCU, MP4TAF, OA4KF, OD5LX, OQ0CZ, OY2H, PJ2CP, SU1MS, SV0WI, UM8KAA, VK0RH, VK3FR/LH, VP4WI, VQ2FL, VQ3CF, VQ4HT, VQ8BBB, VR1B, VS4FC, VS5PM, VS9AZ VS9OC, VU2GE, XZ2TH, YA1AO, YV5AK, ZB1AOB, ZD8IHP, ZS5SV, 4X4JN, 5A1TP, 9M2GA, plus hundreds of other stations including many MM.

14 Mc. Phone

5AMB. I5GN, VS6DJ.
2AQJ (all s.s.b.): CX2AX*, DL1VR*, I1CWX*, KA2IE* KA2DM*, KA7HH*, KV4AA*, KA-7MD*, KM6BO*, KR8LL*, KR8GE*, BV1USC*, MP4BBW*, TG9PS*, TI2HP*, SV0WB*, VS6BE*, VS6EK* VP6WD*, UA1DZ*, W4NQN*, K4KCZ*, W5DZ*, W6EKZ*, XE1PBX*, YN1BS*, YV5GU*, 9M2DB*, 9M2GR*, 9N1GW*.
3AOM DU1CP*, FO8AX*, HP1FL*, HP2FL*, KZ5HO*, TG9CP*, TG9OS*, VR2DA*, VR2DF*, VR2DK*, VR2DP* VS9OC*, VU2GD*, VU2NR*, XE1D*, XE2JK*, YV5HU*, 9M2GA*.
4DO* EA7GK*, SV0WZ*, SV0WT, UA9VB.
L3065 KH6CUQ KH6BDY, KH6BWO, KH-6CLV, KH6CYT, KH6ABH, KA2KZ, KA2KS, KA2BS, KA2NA, KG6SA, KG6IJ, KC6GJ, KP-4AZ, KR5IM, KM6BW, KC4USP/MM, DU6TY, EA6JE, HL9KJ, JA6BC, OA4AV, HL9KR, TG-9PI UA0LO, VE3KT, VE5BQ, VE4VR, VK0CC, VR2DK, VR2DE, VR2DK, VR2CC, VU2NR, VU2BK, VU2PJ, 9M2DQ; on s.s.b.: KH6AHQ, KH6DED, KH6DLF, KX6BT, KT2SB, KV4AA, WA6IFQ/KG6, TI2XK, YN1CK, W/K.

21 Mc. C.w.

2AGH CE3DY*, G2RF*, VS9OM*, YV5AO*.
2ZR JAs*, KH6*, W/K*.
5AKN JA5FQ*, KH6DHK*.
4DO JAs*, KG6s*, KR8s*, DJ2LK*, G8ZO*, LA6IF*, OK3DG*, PA0PN*, UB5FY*, UR8KCD*, UP2KCP*, SM5CCE*, VS1FZ*, VS9OM*, YA-1AO*, DJ4SK, DL7BQ, HB9RB, JT1AB, OE1WB, OE1JL, OQ0RL, UB5AQ, SM5KX, VS6GS.

21 Mc. Phone

2AGH VS9OM*.
5AKN UA0LO*, YV5CH*, VR1FRC* (Fiji Radio Club)
4DO JAs*, KR6s*, KG6s*, DJ3AA*, DL3EA*, DL3HV*, F3KE* UA3EG*, UP2KCB*, VS1KD*, VS5GB*, VS9OM*, 4S7PJ*, 9M2EK*, DL4MA, G6DF, G3NRZ, G3AWZ, I1CCF, I1UA, OE3NH, ON4MS, ON4RC, OH5NW, OH6NS, UR2KAE, MP4QAO, VS1GQ, VS6CL, VS9MB, 4S7YL.
L2022. JAs, and all Pacific.
L3065. DJ4EA, G3YF, HC2IC, HI8GA, G3JAV, FK8AU, KH6BPF, KH6CLV, KH6BZU, KH-6DEU, KB6BH, KP4GN, KP4AOC, KR6CR, JZ-0HA, VK9RO, VK9SB, 9M2DQ, 9M2GA.
QSLs RECEIVED
2AMB CN2BK, CT1FU, ZS6BF, HK4JC, LU7MAJ, VK0CC, 4X4WF, VQ3HD, ZD6DT, YU3CI, OA4FM, ON4LJ
2QL HH2LD, ZD2CKH, VQ8AIW, I1ADW/HV.
2AOM TG9CP, YV5AIP
BERS-195 EA8CG, GC2FMV, UC2KAA, UQ-2BP, UI8AM, VE3MX, VQ4EZ, VS6BJ, VU2EL, EL1WG/MM, LU8EAB, PI1LC, W4YY/MM, UP0L, VK3AQK/car mobile.

ADDRESSES

Ex-FI8AZ—C/o. FFTX, via R.E.F.
OA4KF—L. Avendano, 145 San Isidro, Lima Peru.
LU9EAB—Crisof 334, Victoria, Buenos Aires, Argentina.
EL1WG/MM—Via D.A.R.C. (above from BERS-195)
FB8CJ—Ex-FK8AO and QTH, Box 730, Tananrive. (2QL)
9M2FK—37 Kalawai Rd., Penang, Malaya. (3YD)
ET3CE—P O Box 385, Addis Ababa, Ethiopia, (College of Engineering) (3YD, 2AMB)
XZ2BB—Box 449, Rangoon (4SS)
HC1JU—Box 2951, Quito (also HC8JU from 26 12/59 into January). (4SS)
YA1AO—Via DL8YI. (4SS)
MP4TAF Via R.S G B (4SS)
MP4BCU/AP—Via I.S.W L. (4SS)
VP4WI—QSL via W4ORB.
FM7WF—Milo E. Seraline, P.O. Box 50, Fort-de-France, Martinique.
LU1ZA—Pedro Zanni, QSL via Radio Club, Argentina.
5A1FA—J Bergonzi, Ghadamess, Libya.
FF8BZ—Milesi Yves, R.E.F. BP6000, Dakar Afrique Occidentale, Francaise. (French West Africa)
HE9LAC—Is now HB9VW.
EL1X—Is now W6FHB, C. Reed, Box 27872, Los Feliz Station, Los Angeles 27, Calif.
HP1LO—L. O'Meally, P.O. Box 1616, Panama City, Republic of Panama.
PK6LN—Louis J Noll, P O. Box 76, Macassar, The Celebes, Indonesia.

COMMENTS

This is what some of our DX-ers say:

VK2AQJ: "Conditions were quite good during the first part of December until about the 13th, but from then on they have been very poor. Some evenings I haven't even been able to hear the KAs let alone work them. Conditions have changed from night to night, being poor or very poor. Since Christmas day short skip has been very evident with Sydney stations (200 miles away) roaring in on 20 metres." Well, Bud, I hope you have a good trip to Melbourne and Adelaide. You may have to do a little more arm twisting to get 2RI on the job. I would appreciate his notes.

Some of the fellows forgot the early closing date for the Xmas number and so missed the bus.

VK3AKN: "VK3GU/P is at Physics Lab., Merton Hall, Church of Eng. Girls' School with various operators." Well, Don, I take it the operators are YLs.

VK3AOM: "Conditions were very peculiar during the past few weeks. As in previous reports, I have found W/Ks very scarce, and VEs totally missing. On the other hand, some evenings the South Americans came through well. It will be noticed that there are no Europeans in my report. This seems to be more or less a general state of affairs here, for I did not hear many being worked by other VK3s." Other reports confirm your remarks, George.

(Continued on Page 18)

Short Wave Listeners' Contest for Month of February 1960

The aim of this Contest is to log the Continent of Africa. This is the first of six Contests that will run for one month each. Below are the call signs (taken from W.I.A. List as published in "A.R.," Jan. '60).

Each Contest is to run for the calendar month 0001 on the 1st to 2359 on the last day. Happy hunting fellow s.w.l'ers. By the way, this is open to all Australian s.w.l'ers.

Following are eligible call sign prefixes: CN2, CN8, DR4, CR5, CR5, CR7, CT3, EA8, EA9, EA0, EL, ET2, ET3, FA, FB8, FF8, FL8, FQ8, FR7, FY7, IS, OQ5, OQ0, ST2, SU, VQ1, VQ2, VQ3, VQ4, VQ5, VQ6, VQ8, ZD1, ZD2, ZD3, ZD6, ZD7, ZD8, ZD9, ZE, ZS1, ZS2, ZS3, ZS4, ZS5, ZS6, ZS7, ZS8, ZS9, 3V8, 5A, 6G1, and Aldabra Is.

Zones.—The following numbers apply to Africa: 33, 34, 35, 36, 37, 38, and 39.

You are advised to look in Jan. '60 "A.R.," for list of Zones and Countries from which this list is taken. It is the only list that will apply to this Contest. The areas with more than 100 Amateurs are ZS1 to 9 with 2,500, CN8 250, CR7 100, FA 140, OQ5 100 and ZE 165. Many have only one or two scoring.

Following points apply:

160	metre	band	—	—	20	points	each	logging.
80	"	"	—	—	10	"	"	"
40	"	"		—	6	"	"	"
20	"	"	—	—	3	"	"	"
15	"	"	—	—	4	"	"	"
11/10	"	"	—	—	5	"	"	"
8	"	"	—	—	50	"	"	"

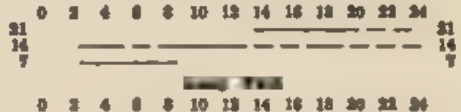
Log.—Standard layout of the W.I.A. Log Book. Date, time, freq., type of transmission, station heard, station working, both RST signals and points claimed. Total points claimed. Each log must be signed to the effect that the entrant has obeyed the rules of fair play. Winners: (1) overall winner, (2) each band, (3) most countries, (4) most zones, (5) highest c.w., a.m. and s.s.b. points.

Go to it chaps and send all your results to M. R. Cox, Flat 1, 37 Boyd Crescent, West Heidelberg, N.23, Vic. The results must not reach me later than 11/3/60. Results will be published in "A.R."

Certificates will be issued for winners and this will not be done until the end of the series.

FEB. PREDICTION CHART FOR AFRICA

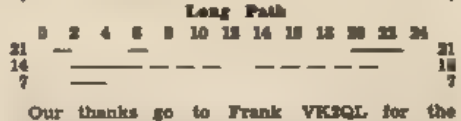
Central-South Africa — Short Path



Long Path

Central-North Africa — Short Path

Long Path



Our thanks go to Frank VK3QL for the above chart. The gaps indicate that the maximum useable frequency or the lower useable frequency are very close to that listed, and due to sunspot activity, increase or decrease in MUF/LUF could quite easily affect these. These predictions depend on activity in the areas and that if the signals are beamed in your direction. Time used is E.A.S.T. African time is from 8 to 11 hours behind us. Check your atlas for local time conversion.

At this stage I would like to thank Tim Mills and his Group for making this Contest possible. They have put a lot of hard work into it, so chaps enter the Contest and let us know if you want more and if you like them.

—Maurie Cox, Sec., VK3 S.w.l. Group.

HINTS AND KINKS

SURGICAL INSTRUMENTS IN AMATEUR RADIO

The medical supply houses can supply you with all the forceps of differing types that you are likely to need for the equipment which appears to be shrinking in size each year.

Still another source of supply is the hospital disposal section. Here you are likely to pick up instruments which are unsuitable for further use in hospitals but quite good enough for use in the Ham shack.

The instruments you will find most useful are the various types of spring forceps (tweezers) and also "Spencer-Wells" forceps. This latter type can be clipped onto leads and they will lock themselves on until deliberately released and are very handy for lead heat-sinks during soldering.

—S. T. Clark, VK3ASC.

DEMAGNETISING TOOLS

Anyone who owns a soldering gun can use it as a demagnetising apparatus. Pass the magnetised tool through the arch at the tip of the gun and pull the trigger. Slowly remove the tool from the gun area. The tool will now be free of its former magnetic qualities.

—L. Macchiavello, CE3DA, "QST," Dec. '59.

TRANSISTOR PROTECTION

To prevent burning out of transistors because of incorrect power supply polarity, place an ordinary crystal diode in series with one of the power leads so that current will flow only in the proper direction If the power supply is accidentally connected backwards, the diode will protect the transistors. Of course, the diode should be capable of carrying the total circuit current.

—Charles Curran, K2DQD, "QST," Dec. '59.

— . . . —

AWARDS

WORKED ALL SCANDINAVIA

Vaestmanland County Radio Society in Vasteras, Sweden, issues the Scandinavia Award to licensed Radio Amateurs everywhere in the world.

"Heard All Scandinavia" is available to all short wave listeners. Rules are the same as below but heard instead of worked.

1. All contacts must be after January 1, 1957.

2. **Europe.**—European stations have to work the following on any or all bands:
50 several stations in Denmark,
[redacted] " " " Finland,
50 " " " Norway,
50 SM5 " " Sweden
Plus all SM Districts 1-7 (206 contacts).

3. **Foreign.**—DX stations have to work the following on any or all bands:
20 several stations in Denmark,
20 " " " Finland,
20 " " " Norway,
50 SM5 " " Sweden
Plus all SM Districts 1-7 (116 contacts).

4. SL contacts are also valid for W.A. Scandinavia

Do not send any QSL cards. Send a list on all your contacts with Call, Date and Type of Emission (A1 or A3).

Your application must be checked and signed by any club or Amateur

You can get W.A. Scandinavia either on c.w. or on phone. The cost is 1 U.S. dollar or 12 I.R.C's.

Send your application to: Radio SM5WI, Vitmaragatan 2, Vasteras, Sweden.

VHF

Frank P. O'Dwyer, VK3OF
190 Thomas Street,
Hampton, Vic.

50 MEGACYCLES

The band let its hair down for the last month and for some of the chaps on the band some of the openings were the best ever, enabling many new contacts to be made. Some sessions were reminiscent of those around the early 50's and the late 40's, but they need to be better yet to equal those. One remarkable feature has been the consistency of the JAs who appeared almost daily from Christmas until Jan. 8, the time of writing. Skip played some odd tricks, several times VK7/JA were swapping S9 reports, though both were inaudible in VK3. On one occasion the skip drifted north and some VK9/JA contacts were made. For VK3, Jan. 3 proved a highlight with JA in 1130-1330, sigs. to 9 plus and many JA firsts were made. Jim 3AZY scooped the pool with 14.

Leading up to Xmas, Es provided some very good openings, then daily for the next 15, VK6 came into the picture with some good openings to the east coast for contacts with VK2, 3, and 4, one session lasting from 2300-0200 at least, commencing on Dec. 15 (E.A.S.T.). The same day they were worked in VK3 during the a.m., heard again at 2030, a lead up to 2300. A summary of that day's activity indicates that VK6 QSO VK2/3. VK3 QSO VK2/4/5/6. VK5 QSO VK2/4/6/7. VK4 made JA as well.

The 20th, another all-day affair for Es, with JA contacting VK2/3/4 5, the VK3 effort 1240-1630. 9XK dropped his sig up and down the east coast around 1800 and gave many a new country. Russ put in some good work and made quite a few contacts from VK4 to VK7 around 1900 of a night. Many and sighs came forth when he pulled the big switch early in the new year to come south on furlough. Pity some of the other VK9s are not on the job, they could have a lot of fun. On the 29th also, Sid 3CI heard DU9 but no contact was made.

The 25th, all day, Es again with ZLs in up and down the east coast not their first appearance by any means. A feature in VK3 on this and succeeding days were strong back scatter signals from the country stations and some unusual contacts were made within VK3.

The 28th gave an excellent short skip effort. Melbourne to Sydney for a couple of hours in the a.m. with VK4 and northern VK2 also pounding in and the almost daily feature of ZLs about 1300.

The 29th more east coast Es with ZL S9 1720-1900 at least, followed by VK5 and 6 with for VK3 JA 1300-1630.

The first day of the new year again had all day Es from 1010. VK3-VK3/4, around 1900 VK6 followed by VK5. During this opening, Doug 5KK heard an XE on c.w at 2045 S.A.S.T but no answer to his call. 6BE managed to QSO 18 VK3 stations in 18 minutes, any faster efforts than that? 9XK collected VK2, 4, 5, 7 and JA was worked by all Divisions. The rest of the week had daily Es with JA heard or worked each day as far south as VK3.

Jan. 3, as mentioned earlier, was a cracker. On this day also, 9M2DQ while QSOing VK6 was copied S9 by the Brisbane and Townsville gang, 1130-1210. What an opportunity was missed through not tuning between overs, the wolves were awaiting the end of his contact to pounce.

Many contacts were made into Darwin by VK4 and 5, so completing W.A.S. for many of the gang.

Features of the month's openings were the prevalence of back scatter, stations spread out from 50.1 to 51.5 with the first 100 kc. left for the rare ones should they eventuate, in many cases the improved and intelligent use of v.f.o's. by those with some experience and the improvement in operating practice as the openings continued. But there is still room for vast improvement in both. Maybe this is a beginners' band, but some imagination should be used by those with their first v.f.o., quite a few contacts were ruined and numbers lost to others by ham fisted planting of signals and no one is interested in your hi-fi trouble or what have you when all they want to do is bid you good day and swap numbers before the band closes.

Top marks to Dane 4ZAX for his excellent signal and huge score. Do not forget those logs, write them out and send them in, it is a courtesy you owe the Federal Contest Committee for the fun they provide with the contest as well as being an indication to F.E. of the activity on 50 Mc. On what other band would you find 50 or more VK3 active at the one time?

VK0CC is now back on the mainland. Keith VK0ED (ex-VK3ZED) is now down at Davis and is interested in 50 Mc. Keith will be operating on 14060 Kc. Saturdays and Sundays at 1900 E.A.S.T looking for contacts with VK with a view to arranging 50 Mc. skeds. He expects to be in operation by March.—3OF.

NEW SOUTH WALES

Dec. 29 was the day of days, the best in seven years' operating experience. Sigs. poured in from everywhere. 2HE worked VK2, 3, 4, 5, 6 and heard 7 and believe it or not, he worked 9XK as Russ' signal roamed up and down the east coast from Rockhampton to Hobart. Very gratifying, as Adrian had heard but not worked 9DB in the past. Russ is a first-class operator and numbers were exchanged in less than 30 seconds, no time being wasted on platitudes. About 1630 2HE dug out three ZLs from the noise after blindly calling CQ ZL, worked 1DE, 4LH and heard 3QK. Shall call east early evening daily and see what happens. There seems less point in their calling blindly now-days at 51 Mc.—2HE.

VICTORIA

After a quiet beginning the band started to show some promise early in the month. On the 3rd, VK4 around noon, the 8th VK3 and 4, nothing much until 13th. David 3ZAT changed QTH to Maffra 3ZEW was mobile on Donna Buang and 4ZAX broke in on 3ZDK to exchange numbers. The 14th, 2ZL (Ballarat) was worked at good strength in Melbourne. 15th VK5 and 6 made it into VK3, quite a few stations worked. 16th, 17th more VK4, 18th VK2, 4, 19th ditto, 20th VK3, 4, JA. Then nothing much until the 24th when 3KC heard 5ZCR apparently mobile on his way to VK3. Christmas Day brought a nice Xmas box to many of us, K2, 4 early, then VK5. During this opening, which was noticeable for its very short skip, 3ZGZ in Mildura was heard and worked by locals, 3ZEA and 2NN were also heard in Melb.

The 26th, the band was open early in the morning to VK4 and around noon to ZL. 27th, 28th ditto, repeats. 29th turned out a terrific day, VK2, 4, 5, 6 and ZL, lots of tired bods that day. 30th, VK2, 4, 5, 6 again. New Year's day to the delight of many brought VK4, 5, 6, 9 and JA to the delight of many again. Jan. 2 and 3 gave VK2, 4 and 9XK to a lucky few. 4th, VK2, 4 early with 3ZDO/3 at Tenterfield northern N.S.W. Their mobile carrier broke down.

Peter doing a fine job on 5 watts to a three element Yagi. So that is about the pattern for the month, plenty of DX from all Divisions for all of us and judging by the scores from some of the other Divisions, the contest is a bit exZAX'ting, eh. 3ZGP.

QUEENSLAND

The 1st, JA1RO. The only one I worked but a good start for Dec. JA6 and 0 were around also on F2 at S3/6. Also 1GY and HLKA and plenty of QRN. The band was quiet till the 6th when we all had a good day, band open from 0920 to 1945 at this QTH. Many stations worked and many contest numbers swapped. 7th, VK3s in around 1000, while the Korean was there around lunch. 9th, VK5s around dinner and worked a couple, not much till the 13th when I worked 7s ZAI, ZAO, LZ, good strength both ways. A mixture of 3 and 5 next day with JA on the 15th and 9XK at 1705 to 1850 at good strength. The VK3 boys should ask Mike 3ZEO about 9XK; also more QRM for you down there, Stewart 3ZTS has been converted to 50 Mc. (I think). Met these boys and Peter 3ZDO on their trip north.

16th, VK3, 5, 7, my log shows these again till the 19th when the Townsville gang 4ZBE, 4RW were around. 20th Max 4HD worked Bob 4NG and Lance 4ZAZ at around S3. 27th, ZLs were in about 1100 onward and caused a stir, nine worked from this QTH. I think John 4PU got one, don't know who else. 4ZBI worked 9XK for the second time at midday. Les 4EH is active again using a dipole, not good copy here Les (was 3ALE). 28th, VK5 and JA worked, also 4's RW and ZBE. Bill 4ZBE has got himself today A.J.D. Certificate No. 1. Where are you going to hang it, Bill? 29th, JA6, S8, 1200-1300, 1830 odd. 9XK and 4RW. 30th, VK3, 5 and JA, band opening early as far as I was concerned, 0935. I had 15 contacts in 1½ hours. ZLs 1 and 2 were in about 1848.

31st a day to remember. Started here by Bob 4NG rolling in S3/8 around 0650-0900. Didn't manage to hook you Bob, but was giving it a go. 4WD and Dane 4ZAX were the lucky ones I think—would the gentleman who flew his flying saucer up in that vital spot do so again so that a few more of us can work Bob. We had a mixture of VK3, 5 and JA0, 1, 2, 3, and 8 to my knowledge. The QSO of the day was with Bert 3KU which lasted 36 minutes and we could've had longer. Seems as if I QRM'd or pinched JA1RO from 3ZAT. Sorry David, but there were sure plenty to pick from. You could have had them all on New Year's Day, I was QRT.—4ZBI.

WESTERN AUSTRALIA

Conditions in VK6 over the period of the Ross Hull Contest have been very disappointing with very few openings so far. Only three openings could be classed as good, the other three or four being very patchy.

The first opening came on 6/12/59 when half a dozen of us spent a couple of hours trying to attract the attention of 4ZAA, 4ZAX, 4RH, 4CW, 4HD and several others who were working VK3s at the time. My score for that session was 4HD, 2ZER and JA2AAM.

One noteworthy feature of this season so far has been the ease with which VK3 has been worked, compared with last season when VK5s were most common. I believe Wally 6WG has fared much better than us in Perth.

A surprising number of JA openings occurred during December. Personally I took part in five, one of which was one of the best for 1959 (21/12/59). Those JAs are very intelligent fellows; it didn't take long to educate them into giving numbers.

On the 18/12/59, t.v. signals on Channel 2 appeared in Perth. I saw them myself, in common with at least two other people. A saw-tooth pattern was accompanied by orchestral music. As Northern VK3 was coming in on 50 Mc. at the time, I feel that the sigs must have come from ABQ2. That station has certainly made its presence felt since it opened. Here's to brighter and better ABQ2 signals in VK3, 5 and 6 in the future! It may help to educate the authorities into the facts of life in v.h.f. before it's too late.

A new set of signals is making regular appearances in the 49.5-50 Mc. band. On 49.6, HLKA has been replaced by a telephone service operated by American personnel. On 49.62 a harmonic of a buzz saw has been appearing. Direction is N.E. No clue to their location so far, except that they appear and disappear together, which may mean they are at the same location.—6BE.

TASMANIA

Here are some of 7LZ's doings for the month. First big opening of the year on Nov. 28, the next Dec. 1 to VK4, 7LZ and 7ZAO being active. Dec. 6, open spasmodically to VK3 and 4 from 1000-1800. Dec. 9 VK4 only, next day sigs too weak to read. 12th to 4ZAX only, 13th to VK4, 5. 16th to VK4, 7BQ heard JA at 1200 but no contact, 17th VK2, 4. 18th VK3, 19th 4NG and 4ZAX, 24th VK3, 4 and JA0EV and JA1BWD, no QSO with them. 25th VK3, 4, 5 and ZL1. 28th VK3, 4, 29th VK3, 3, 4, 5, 9XK, JA1, 3. 31st VK2, 3, 4, 5, JA0, 1, 3, 9. Jan. 1, VK3, 3, 4, 5.

The openings this year have been of interest in that more JAs have been worked than thought possible, lack of major openings to Sydney, nothing of 5ZDL at Darwin, ZL1AUZ the only ZL worked by 7LZ, and VK6s not heard when other States were working into VK6. JAs open to VK7 18th, 24st, 29th, 31st Dec. 7LZ worked 13 JAs on the 31st. The opening on Dec. 29 gave signals ranging from S9 to out at a very rapid rate, the band also being open to VK4. VK9XK S9 for almost two hours on the 29th, worked by 7LZ and 7BQ. 7LZ in contact three times while getting 7BQ/9XK in QSO. 9XK also heard on c.w. Jan. 1 by 7BQ. Col's 13 JA included 0, 1, 2, 9 and he could hear JAs calling CQ and getting no answer, the opening to VK3 and 4 at the time being very scratchy. Maybe JA openings to VK7 have been missed before. The opening on the 31st last 1515-1630. 7PF activity around 50 Mc. has been confined to watching ABQ, a picture usually being visible during most 50 Mc. openings. The m.u.f. appears usually to be around 70 Mc. as the sound is not always audible.—7PF.

144 MEGACYCLES

NEW SOUTH WALES

My apologies for lack of notes, chaps. We've a lot to catch up on. Nov. and Dec. have been very busy v.h.f.-wise. The Nov. meeting heard a very interesting lecture by John 2ANF on Receiver Front-Ends and Noise Figures.

(Continued on Page 19)

CORRESPONDENCE

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

T.V.I.—YOU CANNOT WIN

Editor "A.R.," Dear Sir,

What constitues t.v.i.? The other day a local Z licensee was reported to the Radio Inspector for causing interference to Channel 2. He was simply "pouring in," according to the report.

I might mention the t.v. set in question was home-built from ex-disposal parts and is located about 700 miles from the nearest t.v. station, while the Amateur was approximately two miles distant, air line.

After inspection of his station, he was given a clean bill from the interference.

How far have you to be from a t.v. station before you have to worry about t.v.i.? Also, the distance before you pay the viewing fee of £3?

—Bob Wilson, VK4RW.

"NO REPLY FOR THIS S.W.L."

Editor "A.R.," Dear Sir,

Since my letter (Jan. '60) appeared I received one very prompt reply. This was from an Interstate Amateur who enclosed a card that had been received from an s.w.l.

It was a typical example of some s.w.l. reports. It was a commercial card intended for Amateur use. The details were filled in apparently by the use of a ball pointed pen. Firstly, the address could not be read, and the suburb named does not exist. The number was incorrectly set out, as it read, "SWL/LXXXX," the letters "WIA" being left out although the s.w.l. is a member of a group. The last figure could have been any of four.

On the back in the details appears a christian name, which does not belong to either of the two Amateurs or to the s.w.l. The next line states, "Very clean all QSO with VKXXX." The contact was held 18 months before the card was sent and was on 40 metres, over a distance of less than 1000 miles. The spelling of the name of the rx was so peculiar that to my knowledge no one has ever made one of that type. The report was given as 5, 9, 8, yet it was a phone QSO.

This will be one s.w.l. who will not receive a reply. After this example it is time again to point out to s.w.l's. that they should make sure their report is going to be of use to the Amateur and that it is a true and correct record. To Amateurs receiving such cards, I suggest that you return them to the Secretary of the S.w.l. Group in the State it came from so that the s.w.l. can have his mistakes pointed out.

My sincere thanks to the Amateur who took the time and trouble to return this particular card.

—Tim Mills, WIA-L3053,
Secretary, N.S.W. S.w.l. Group.

P.S.—A note here to the s.w.l. secretaries. There is in existence a very good tape recording on the "Art of Short Wave Listening" (15 minutes). We will be using this tape again in February and after that any Group interested should contact the N.S.W. S.w.l. Group for the loan of this or any other tape we may make.—T.M.

— . . . —

INTERNATIONAL CONTEST

The following information arrived from the Czechoslovak Consulate General in Sydney too late for the January issue.

Radio Prague foreign language broadcasts is holding an International Contest in January and February, 1960, on the occasion of the 15th Anniversary of the Liberation of the Czechoslovak Republic.

Details of the Contest will be announced in Radio Prague's Foreign Language Broadcasts beginning Jan. 1, 1960, and until the end of February. Send your replies—postmarked not later than February 29, 1960—to Radio Prague, Czechoslovakia, clearly marked "Contest."

Main prizes will be free trips to Czechoslovakia and many other valuable prizes—products of Czechoslovak industry. All correct entries that do not qualify for a main prize will receive souvenirs.

Radio Prague broadcasts in English at the following times and wavelengths:

0830 to 0930 GMT on 25.34 metres (11,840 kc.), 19.76 metres (15,185 kc.), and 13.99 metres (21,450 kc.).

Listeners in the Far East hear a re-broadcast of Radio Prague's North American "Program II." the following day.

VHF

(Continued from Page 17)

The v.h.f. meeting on Dec. 4 was joined by the S.w.l. Group for our annual swap and auction sale. Much "useful" gear was brought along by members and disposed of by auctioneer Bob 2OA. Everyone seemed content as they lugged home their trophies.

Dec. 16 saw that canny pair John 2ZAV and 2OA again hiding a tx that left the hounds milling around in the bush in various dead-end tracks. At 9.30 p.m. all hands retired to John's house for the annual Xmas Party. John's XYL Pat, and the ladies assisting did a sterling job and on behalf of all the members attending I would like to say "Thank you John and Pat."

There was no meeting in January, thereby allowing all hands a holiday and time to get stuck into the Ross Hull Contest on 6.—2ASZ.

VICTORIA

Ballarat.—The pre-Christmas rush seems to have caught up with a number of 2 mx operators judging by the number of signals not heard, however some good contacts have been made. Reg 3ZFD in Horsham has been working Melb. in between complaining of "drifting" s.s.b. signals. The source of drift has not as yet been determined. David 3ZAT (Maffra) has been worked by Brian 3ZBS (Ballarat) and Ron 3ZER/P at Mt. Buninyong. Max 3ZCW has not been heard on 144, probably working on the d.c band next door. John 3ZFW and Kevin 3ZHM are active over the week-ends. Jim 3SV in Castlemaine has completed a nice new shack and should be on the job again shortly. There is more interest being taken in 2 mx DX and some interesting skeds are now at the planning stage. Watch this band, it may have some surprises.—3ZEJ.

WESTERN AUSTRALIA

Several checks were run (VK2-VK6) on 144 Mc. during the 50 Mc. openings, but with no success. However, we feel that a continuation of tests will bear fruit some time. We are not attempting the impossible; it has been done before.

The only local activity at present is duplex working between 2 and 6. However, the lack of activity is understandable, considering the high level of 6 mx working.—6BE.

TASMANIA

The weather conditions have been against us for VK3 openings. 7BQ on Dec. 31 worked 3ZCG/G at Sale for the first opening to Sale. 3ALZ was also QSOed by 7BQ and 7LZ. 7PF who is now on from the Drome at Launceston was out and 7LZ had to rush away. 7ZAK is being contacted to arrange skeds between north and south VK7, also believe that an ex VK3 is going to operate from Mt. Wellington when power is available. 7RL at Stanley is going to operate again this year and possibly 7ZAA at Burnie.—7PF.

DX

(Continued from Page 15)

VK4SS. "Compared to previous Decembers, this month has been very poor for DX at this QTH (Brisbane) and we have had a long spell of thunderstorm activity here (three weeks) with continuous QRN at S7/8 level." Thanks, A., I did look for HC8JU around 0600-0800z and landed him. He was 589 on both 21 and 14 Mc. F.b. on completing your W.A.S.

VK4DO, like 4SS, found the bands difficult with so many storms. We wish you and the XYL all the best for your trip to England and the Continent. Half your luck, OM. Will miss your letters.

VK5RX has worked 243 countries. His antenna is a three element rotary beam. Good going, George, and hope you get that YS1O QSL.

VK2OT Thanks, Max, your note much appreciated. He says 9N1GW in Catmandoo, Nepal, has been on around 1200z, also HA8WS is on 14309 Kc. s.s.b. at about 1800, and XZ2AD on s.s.b. 14 Mc. at 1200z. QSLs for 9N1GW go to Box 9136, Washington, D.C., U.S.A.

L3065: "During the month the band conditions have been pretty poor on both 15 and 20 metres, although signals from the inlands in the South Pacific and in Japan have been heard most nights. Signals from India have also been heard regularly, but at low signal strength. Central Americans appear each day about 0530 to 0700z and again at 1000z on 20 metres."

My thanks also go to W4KVX, VK2AGH, VK2QL, VK3YD, VK5RK, L2022 and BERS-195 for much of the material used in these notes.

W4KVX notes will be sadly missed next month. The fire mentioned earlier in the notes was a terrific blow to Don in particular and to the DX Amateurs in general. Let us hope that promised help will soon have him back in business again. In the meantime, chaps, I would like you all to make an effort and send along any news that will help these notes. 73 for now, VK2ZR.

THE MEGACYCLES

Victoria. Ron 3ZER has been running skeds with 3AUX and other Melbourne stations with much success. Rumor has it that he has also broken the previous 1 mx record again. I will find out the details again next month.

T.V.I.

On many occasions during the previous month, Channel 2 stations have been logged Interstate. Probably the funniest story to come out of it all was about the Melbourne woman who rang up ABV2 and complained about the poor quality of the picture transmitted one morning. They told her that it was ABQ2 which she had been watching. But all this has a serious side. All these openings should be logged if possible and the information used in our fight for Channel 1. Is there some enthusiastic person who could accept the responsibility of collecting these reports in case they are wanted in a hurry?

GENERAL NEWS

VICTORIA

Neville 3ZGH has been holidaying in VK4 and has been heard from 4ZAX on occasions. 3ZGM now v.f.o. controlled and doing good business with the DX. 3ZJE mobile with a transistorised power supply and modulator, running 40w. to a 6146 and halo. Very nice signal John is putting out. Using 2N278 in mod. and d.c converter. One nice contact was when he was portable near Apollo Bay and worked 3ZFM near Horsham, 160 miles, Sigs. S8. 3ZCG heard 3ZDK 20 over 9 while portable at Sale. 3ZDU portable South Aust. worked 3ZDO/P VK2. 3ZGP has a quad up 38 ft., thanks to 3ZEO and Maurie L3065. Quite a few new calls heard around Melb., 3ASB, 3RV, 3AMA, 3ZHW, 3AE returned again and 3JE. Some of these are OTs of 50 and 56 Mc. We even believe that Snow 3CW is making his way down the band from 54 Mc.

Some unusual signals have been heard at 3ZGP's location earlier in the month around 52.5 Mc peaking up W. and S.W., running tone and on another occasion modulated but unreadable, plenty of QSB as well. Anyone hanging around on that frequency these days? Some shocking operating procedure has been noted during the DX of the last month. Should look to your procedure chaps. Some of those over modulated, splattering and pile ups on frequencies leave much to be desired. Makes a lot of noise alright, but spoils an awful lot of fun for other less fortunate chaps who happen to be QRMed by your signal. Particularly in crowded locations. Look to it chaps, brush up your techniques and remember the Amateur code.—3ZGP.

QUEENSLAND

Congrats (or otherwise) to Kevin 4ZDK, believe he is starting to consider the advantages of XYLs. Will we see you again on six son? Max 4HD going QRT for a few months, he is shifting QTH. Yes, really pulling things down and moving a little closer to John 4PU and Europe, two miles isn't it? So John you will need a mighty big suppressor to keep out local QRM now. To all readers of this column, all good wishes and good DX for 1960 from us up here in VK4.—4ZBL.

WESTERN AUSTRALIA

The Xmas Barbecue was well attended and enjoyed by all. There is a suggestion for a Combined Radio Society, W.I.A. and V.h.f. Group Barbecue to replace the Annual Radio Society function which usually takes place at Crawley annually. It has become too much of a financial burden for one group to carry.

Glad, XYL of 6ZAV, is convalescing after a major operation, she is making good progress. All the best, Glad. 6CL is threatening to return to 6 mx and has been working cross band—7 Mc. to 50 Mc.

Who lost the crystal out of his crystal set on the last Fox Hunt? Shame!

Don 3ZGK and Len 3ZGT are home on holidays until March. Noticed some VK6s become quite excited (for a few minutes) on hearing Don call. Don finds it difficult to work VK3 DX from the West. Won't they talk to you, Don?—6BE.

PREDICTION CHART, FEB. '60

S W L

Maurice Cox, WIA-L3055
Flat 1, 37 Boyd Crescent,
Olympic Village, Heidelberg,
N.23, Victoria.

Hi fellow short wave listeners. I hope all is well with you and the DX has been kind to you since the New Year started. I am very glad to say I have so much correspondence and information that I don't know where to start, so here goes.

As you all know we are running a QSL ladder. I think everyone knows what I want, but just in case you don't know or have forgotten, I want' Number of countries heard, countries confirmed, and zones confirmed, that is by cards you will give the last two totals.

Now seeing that many of us listen to the short wave broadcast bands, I am going to start a QSL ladder for them. All I want again from you is a list of s.w.b.c. countries heard and the number you have confirmed (by QSL card). I would like to put the scores in "A.R." each month starting from March issue, so you have about three weeks to get on the job and let me have your scores for both the QSL ladders. Now hop to it chaps, send 'em in.

VK5 NOTES

At the Xmas Party we had a grand time, there were 14 of us present and when the preliminaries were over, we got down to earth talking shop. We really had a good old chin wag. Among the notables present were Fred 3YS, Len 3ZGF (Past President of the Group), Bert 3ZGD and John 3ZDX; very pleased to see you chaps. So as you will gather, you chaps who didn't come along missed a good time. Anyhow hope to see you all at the meetings in the future.

We are running competitions each month. Last month it was the number of W States we could hear and believe me it was keen. The place getters were myself with 31 States. Gee, did I burn the midnight oil. Most of them heard on 20 mx between the hours of 2300 and 0300 E.A.S.T. I picked up a lot on s.s.b. Next was Ian Thomas with 28, then Tom Haywood with 23, Mac Hilliard with 20. They were all good scores. That's what I call DXing. The one we are running is the number of countries heard on all bands, s.w.b.c. and Amateur, so go to it.

By the way, listen to the Sunday morning broadcast from VK3WI. I always have news for the s.w.l'ers but to keep it going I would like reports on band conditions and any other useful information that will help the s.w.l'ers. I received my first 80 metre QSL card recently and guess where it came from, W6ICG, how about that?

Now there's a lead chaps, write and tell me some of your rare and treasured cards that you have received.

Another service I have for you all is that I visit the rooms once a fortnight and collect s.w.l. cards. These I send on to their prospective owners. I have three belonging to our past Secretary, Ian Hunt, but I am sorry to say he has our past minute book and a bundle of s.w.l. cards. I have written and asked him to return same but he hasn't done so yet. When he does I'll forward on his cards. I hope you read this Ian and you will do something about it O.M

At this stage I would like to welcome to the Group the following new s.w.l'ers: L3075, G. Glover, of Kyneton, L3076, R. Young, of Brighton, L3077, D. Fraser, Prahran; L3078, A. Fisher, Heathmont, L3079, S. Reed, Preston, L3080, J. Cunningham, Heidelberg, L3081, C. Roberts, Glenroy, L3082, L. Brehant, Pucka, L3083, A. Brooke, Glen Iris; and L3084, A. Page, Alexandra. All I can say chaps is good DXing and the best of luck to you all.

CORRESPONDENCE

I have plenty this month, thanks to all who read last month's page, so please keep up the excellent work.

Firstly from a new member, L3075, Geoff Glover, of Kyneton. Thanks for the letter Geoff, here are some quotes from it: "I spend all my spare time in the shack making my rx better. I have a 13 tube double conversion rx. I always read the s.w.l. notes in 'A.R.' and think you do a very good job" (thanks Geoff). He says he hopes to get down to the meetings some time. (Hope you do, OM.)

A letter from L2081, of Broken Hill, Graham Rutter says there are only two s.w.l'ers there (what about it Tim, how about encouraging more from the "Hill"). What do you think of this you s.w.l'ers? Graham's rx's are a home brew 5-tube "bomb" and a piece of monstrosity which may be termed a rx. It is home made and has seven tubes. It was built up in sections made out of spark plug tins. The dial is a piece of hardboard, looks very impressive from the outside but looking behind it one sees a mess of seven spark plug tins soldered together, each tin having a valve in it. Looking under, you can see that the sections are joined by holes cut in the sides of the tin and the wire passed through. He says it is a rx to end all rx's. Well blow me down, it just shows what can be done.

Here's a letter from John 3ZDX, WIA-L3046. He is on 80 Mc. using a Command tx as a v.f.o., QQE03/12 (12 watt modulator, pair 6V6s), antenna is a cubical quad. Receivers, xtal locked converter, Philips No. 4, and a BC453. He would like s.w.l. reports, so what about it?

A letter from Alex Fisher revealed that he was a W/Ops. for three years during the war and is going to one day do his A.O.C.P. At the present he is sigs. instructor to the Heathmont Scouts. Good work, Alex. Very soon we hope to invite all Boy Scouts to join the S.w.l. Group.

Thats all the corro. for this month, thanks a lot chaps, it is much appreciated. Now to more news from Don Grantley.

SUMMARY OF THE YEAR'S ACTIVITY

He says this year has been a notable one for the listeners, and for the s.w.l. groups in general. New groups have been formed, old ones reorganised, and as a result, the movement is at its highest peak for many a long day.

He can speak from personal knowledge when he says that the growth of the VK2 and VK3 Groups have been due entirely to far sighted members of the two s.w.l. councils, both of which it has been his good fortune to work with on an unofficial basis. To the Divisional Councils of these two States, a warm vote of thanks must be extended, for without their support we could not progress the way we have done. Finally, he would like to thank the Editor and the Publications Committee of "A.R." for the consideration which they have given to us at all times. New plans are under way, and this year should see an even greater increase in our activities.

The greatest achievement this past year was the response to the R.D. Contest (Listeners' Section). We didn't win, but that was a minor detail, the main thing being that through our combined efforts, it has shown what the listener is capable of doing, and we sincerely trust that this effort will be doubled in the 1960 Contest. To the winners we offer our congratulations, but don't rest on your laurels, Eric Trebilcock may take it into his head to try and win the next one, then what hope have we newcomers got? Very sorry Eric that you had to be on shift that week-end, but who knows, maybe next year, eh?

As far as his own activities are concerned, Don has been almost inactive for most of the year and at the time of writing (Dec. 16) he is out of business again owing to the rx blowing up.

ALBURY RADIO CLUB

Three of the younger members have completed the construction of their receivers and by this time they should be listening merrily. Several of the members of the VK2 S.w.l. Group are busily learning the code, under the very capable eye of Art 2EU, who as an ex-R.A.A.F. instructor, just missed being one of my instructors at Point Cook during the war.

GENERAL ENQUIRIES

Any associates who wish to enquire about the S.w.l. Groups should contact the Secretary of the S.w.l. Group of their State. If there is no Group, then approach your Divisional Council on the matter. The louder the noise, the more chance we have of being heard.

For general enquiries from listeners to any phase of radio, there is a man who deals with your special problem. Contact either Maurie Cox or Tim Mills at 39 Bullecourt Ave., Mosman (Maurie's address appears above), and your query will be passed on to the respective "expert".

We want to hear from you, we want to know what you do, what you think, and all about your station. Particularly we would like to see more listeners send their notes for the DX page into John 2ZR. If you have occasion to write to either Tim, Don or myself, then enclose a sheet of your activities and we will pass them on to the DX page for you.

SLOW MORSE

There are many code instructions on the air these days, but the one from the U.S. Naval Reserve may not be well known to many of us. It is not slow in the sense of the W.I.A. broadcasts, but ranges from 5 to 45 w.p.m. As Don has mislaid his time chart, he has quoted in Californian time. K6USN on 7136 Kc. from 1830 to 1930 hrs. (West U.S.) sends from 5 to 45 in groups of five minutes at each speed. On Friday at 1900 to 2030 it is transmitted simultaneously on 80 to 160 metres. And from Monday to Thursday at 1930 to 2200 from L6NDW on 4050 Kc. we have it from 8-12 w.p.m. in half hourly groups. These transmissions are heard here and they are good. The 7136 Kc. provides very solid practice, as there is such a lot of interference about that at times it becomes a real test of operating ability.

If you want to become proficient at the code, there is little point in sitting down taking land-line type of transmissions, for when the interference is piling up under actual operating conditions then you will be lost. Clear transmissions are ideal for building up speed, but you must have that experience under heavy QRM.

PHONE STATIONS IN THE SOVIET

We often get enquiries re phone stations operating in the Soviet, so here is a list which was up to date a couple of months ago.

Zone 17: OA8AA, UA9CM, UA9KCC, UI8KAA, UH8KAA, UA9KCE. Zone 18: UA8VB, OB, OI, OK, UA0OE, UA0KAR. Zone 19: UA0LA, LC, KDA, GF, KQB, KBB.

Thanks very much again Don, your letters are always welcome.

VK2 NEWS

This Division is running the first of six contests this month. The aim is to log all stations heard from the AFRICAN continent. It runs for the whole of the month. We would like to see every State in VK take part in this. The Contest for March is to log ASIA. The later months being Europe, Oceania, North and South America.

On behalf of this Division, we would like to pass our best wishes and good DX to the VK7 S.w.l. Group. We extend to you our challenge for all contests.

Thanks Tim, glad to hear from you.

LISTENERS' GROUP IN QUEENSLAND

Mr. W. R. Davis, WIA-L4001, is desirous of forming a Short Wave Listeners' Group in Queensland. Anyone interested is requested to contact him at 14 Belgrave Street, Hawthorne, N.E.1, Brisbane, Qld.

All VK4 s.w.l'ers are earnestly requested to assist in this project so that a group can be organised and kept alive.

SOUTH AUSTRALIA

A letter to hand from Trevor Hutchesson, L5030, and I quote from his letter: "Just thought that I would let you know that the VK5 S.w.l. Group has been taken over in the S.E. of South Australia by Fred Aslin (L5020) and Jim Edlington (L5021) as the S.w.l. section in Adelaide was closed because of lack of interest by members. Regular meetings are held at the local b.c. station every third Thursday in each month. Interesting topics are discussed by the nine s.w.l's. and eight Amateurs of the S.E. There are more younger ones becoming interested as the group's activities expand. My brother is a s.w.l. also (L5031) and entered a log in the R.D. Contest and obtained a reasonable score on only 40, 20 and 15 metre bands. I entered the VK-ZL Contest and obtained quite a good tally for my first contest. Some of the group will be entering the N.F.D. Contest and would like to challenge the VK3 and VK2 boys. My brother and I are keen DX listeners although the rx we use is battery powered as the 240v. a.c. is not connected around the district yet."

Thanks Trevor, keep up the good work. Jot me a line any time OM, and glad to know there is activity in VK5. We only hope it continues.

QSL LADDER

	Heard	Confirmed	Zones
Eric Trebilcock	261	247	40
Don Grantley	187	45	35
Maurie Cox	163	18	14
Mac Hilliard	153	48	—
Ian Thomas	77	12	9
Tom Haywood	53	5	—

There is a letter from Don Pratt, of Western Australia, but I am not going to put it in this month as I think by now I will be towards the end of the page, so it must wait until next month.

73 till next month, your scribe.

NOTES

NEW SOUTH WALES

The December meeting of the N.S.W. Division was held at Science House, Gloucester Street, Sydney, on Dec. 18, at which a rather depleted attendance of 42 members were present. No doubt the proximity to the holiday period had some effect to the numbers attending. The President, Dave 2EC, opened proceedings at 8 p.m. and announced that the bulk of the meeting would be of a social nature where members would have ample opportunity to mingle and exchange views on the varied subjects Amateurs hold.

Discussion was held on the desirability of including technical articles in the monthly bulletin, but it was pointed out the increased cost this would entail to the Division.

It was decided that the January Council meeting would be held prior to the next general meeting of the Division.

Detailed reference was made by the members of the social committee (2ACD and 2MP) on the Convention held on Jan. 30 at Dural. The meeting closed at 9.45 p.m. for coffee and the usual get-together.

HUNTER BRANCH

It was rather unfortunate that the I.R.E. decided to hold their dinner on the same night we always have our break-up party, but those who deserted the ranks of the Amateur may have gained around the waist, they certainly missed probably the most entertaining and enlightening lecture of the year. Leo 2AC certainly was in good form even though his subject was s.s.b., however being so simply presented it gave quite a few d.e-hards a lot of food for thought. Those present were 2ANG, 2AFA, 2ZDF, 2ZRR, 2CS, 2ZJR, 2RJ, 2ZDL, 2ZMO, 2ZL, 2SF, 2AQR and associates Sutherland, Foster, Gray, Fyfe, Stobbs, Richardson, Bailey, Mullen, Lindsay, Finlayson and Sumner. 2ANG and Frank Finlayson were strangers (to me) so come again chaps. Frank 2QL will be this month's lecturer—subject being Ionospheric Predictions.

Bill 2XT returned home for Xmas, believe it took three days to get him through customs. I stayed home all over Xmas holidays expecting Bill to bring me a box of Yankee charoots. Wouldn't take them now even if offered as I believe he has been on s.s.b., anyway, Gordon Sutherland has smoked them all. Father Xmas departed from Gordon's house leaving behind stereo-hi-fi stuff then went to Stuart's (2ZDF, abode with the same intent. That ought to keep the kids quiet.

Varley 2SF joined the painters and decorator's union over the holidays—2ZL please copy. Believe Frank 2FX cross-eyes are now square through excessive t.v.-servicing. Rodney 2CN is now sporting a gigantic tower, nearly as big as the one near Wattagan, t.v. or v.h.f., Rodney? John 2QX still brass pounding.

Gordon 2CI also waving the paint brush around. Harold 2AHA quite an expert in window dressing. Ernie 2FP now ensconced in his new workshop cum experimental laboratory. Apparently one joker didn't read my last notes re leap year as Les 2RJ has been squiring a blonde here and there. Be warned mate and stick to that new front end you have built. Stan 2ZDL still awaiting that full call whilst his mate Stuart put up a new antenna to assist migratory birds. Bill 2ZL is now no longer "Forever Amber," replacing the aforesaid bulb with a five-watter. Several reasons have been given: Using too much current, traffic halting awaiting the red light, t.v. owners know when he is on the air, etc., etc. Take your pick.

Bill 2XT now Commodore of the Bull St. Yacht Club. Lionel 2CS still on 3.6 s.s.b. and understand No. 3 son is following in his footsteps and joined the Silent Service. 2FP tried to work 2XT whilst the latter was in the States with the feeders twisted in the wrong places. 2ZDF worked 2AHH on 144. Bill 2ZNW also in the contest. Bob 2AQR can vouch for the efficacy of r.f. on choke-vines. Associate Frank Stobbs now has a job for life once a year as washer-upper each year at our Xmas Party, which this year was better than ever with plenty of eats and nice hot coffee.

Next meeting, boys, Friday 12th, at usual rendezvous. See you there, 2AQR.

APPRECIATION

Essie, XYL of the late "Pop" Lewis, VK2AHL, was so overwhelmed with cards and letters of sympathy that she finds it impossible to thank individually all those kind Amateurs. Please accept this as her thanks.

CENTRAL COAST ZONE

The Christmas meeting was a social occasion held at the home of Major 2RU. We must again express our gratitude to Ruth, XYL of 2RU, whose magnificent suppers continue to delight

During January, Fred 2ALA was caravanning complete with mobile, where he headed for VK5. Just inspect the caravan, boys, it's made by a craftsman and it's labelled "Sea Kew." Fred's signal from East Gosford is generated by a Geloso and 807, pi-coupled to a wyndom, also H.R.O. receiver. Holidaying at The Entrance, 2ADA and 2GG have been heard with good mobile signals, also near-by, 2VL.

Monday nights at 2030 on 3635 Kc. our group meets to swop news. We welcome Trevor Huntley of Woy Woy who has passed his ticket and is awaiting a call. This fellow should be good at smoke signals as he uses them in the Post Office at his daily work. Rex 2YA begins teaching at Vaucluse in February and may stir up some activity among the bright pupils. Reg 2AI not so active lately due to a rush of work. However, a new a.m. rig with 813 is under construction. Turn down your r.f. gain now, lads. His s.s.b. mobile was heard from the Riverina recently with a very good signal.

New call VK2MV, Geoff Morris, has not commenced transmission yet, but will be on soon when the bedroom furniture is finished. Alec Swinton should pass the test soon. Time for study is hard to find when there's a passion fruit crop to harvest. The same might apply to oranges when considering certain other members of the Gosford Radio Club.

Your scribe, 2ON, did not notice any 6146s in his Xmas stocking but hopes Santa may have left an 807 here or there. Work on a band-switching xtal controlled converter continues. Has anyone built one of those monsters? Crystals appear to be no problem now the etching process is understood. This is a foolproof method to shift frequency up to 100 Kc at 7 Mc.

2LX inactive due to too much t.v. work, likewise 2RU. These chaps' working hours are worse than doctors. 2PJ keeps Saratoga on the map with his 80, 40 and 15 metre signals.

Mention might be made here of the wonderful Tasmanian hospitality. The writer spent a fortnight there recently and had the pleasure of meeting Hams in Launceston, Burnie, Zeehan, Queenstown, Bronte and Hobart. If you want to see rugged alpine scenery, I can recommend the country around Queenstown and I hope Leon 7JP is there to tell you about this interesting copper-mining town.

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VICTORIA

Victorian Division zones and affiliated clubs are given a last reminder about the perpetual trophy to be awarded to the leading zone or affiliated club team in the N.F.D. which is to be held on 13th and 14th February. The competing teams to enter in Section C.

The claimed score is to be forwarded to the Divisional Secretary at the same time as the log is submitted to the Federal Contest Committee. The Secretary will confirm the score with the F.C.C. The winners are to hold the trophy for a period of one year.

The first general meeting of the Division for the year will be held on Wednesday, 3rd February, at the Radio Theatre, Royal Melbourne Technical College.

NORTH EASTERN ZONE

This zone is dead and at the last convention eight of us buried it, until its resurrection some day in the distant future. Those who attended were the President, Vice-President, Zone Correspondent, 3APF, 3HZ, 3AQB, a visitor from the Marist Bros. College at Kilmore, and associate Jim Harrington.

Fred 3YS turned his car over at Kilmore and consequently did not arrive. Max Hull sent a telegram saying he would be unable to attend. Just as we were about to leave after two hours wait the two G men from Radio Australia arrived.

Peter, Sid and Bruce still have nightly skeds on six with Sid still working JAs and other Australian DX when the band is open. Keith 3JC watched ABQ2 on t.v. one afternoon, the picture was spasmodic to say the least, but it was still a picture; the sound was excellent. It came in on the back of his array and he would have liked to turn the array around and see if the picture improved. Six metres must have been wide open at the time. Ken 3KC has a tower in the course of construction to take a three-band quad.

MOORABBIN AND DISTRICT RADIO CLUB

At our January meeting, held on 18th, in preparation for a renewal of 80 mx tx hunts, Ed 3EM gave us an excellent lecture on loop antennae and mobile gear suitable for such hunts.

This year we have drawn up a syllabus of events in which is included social as well as all Ham activities. We propose having a barbecue in April, picture nights at the Club, and visits to various places, amongst which are The Herald-Sun, D24, and Television Tx's. These are as well as our monthly meetings.

Our committee member, Bob 3NZ, participated in the Queenscliff to Devonport yacht race and after a very good crossing, made third place. Congrats., Bob!

Our latest honorary member, Chris 3AXU, honored us with a visit on 15th. His company was welcomed and many a nice yarn swapped. We are always pleased to welcome any Ham who may be travelling through Melbourne. Country and Interstate Hams take note of my (3LC) telephone number, BY 2913, at any time of day or night.

Hope you have all started 1960 in fine style.

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QUEENSLAND

BRISBANE AND DISTRICT

Sorry about the lack of notes last month but I'm afraid I slipped up on my dates; I should have remembered that the dead-line date for "A.R." was a week or so earlier at Christmas, but I forgot. In any case, I apologise and won't let it happen again.

The new year is with us and we are fast approaching the "off period" when the sun-spots calm down for six or seven years and the enthusiasm of the Ham fraternity seems to do likewise. There are still a lot of good QSOs to be had even in this "off period" and if we just stay off the air, the next I.T.U. Conference will cut our bands down even more. Talking about the I.T.U. Conference, you have possibly heard about the ill health of our Delegate to Geneva, Johnny Moyle. I know that John has our hopes for a quick recovery.

Our Christmas "get together" was almost perfect; the site was the best yet, the food and service was superb, and the liquid refreshment was served at just the right temperature by a uniformed drink waiter. There was only one thing lacking to make it perfect—we only had a handful turn up!! At the November general meeting a show of hands showed close to twenty intending guests and we expected a half dozen or so others. We catered for twenty-five and, brother, were we mistaken. Oh well, we'll know next time.

CONTEST CALENDAR

Compiled by W.I.A. Fed. Contest Com.

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NATIONAL FIELD DAY:

Date Saturday and Sunday, 13th and 14th February, 1960.
Duration Saturday 1600 to 2300 hours, Sunday 1000 to 1600 hours.
Rules See January "A.R."

FRENCH CONTEST FOR 1960:

Date: CW—1300 GMT, Feb. 27, to 2100 GMT, Feb. 28.
Phone—1300 GMT, April 9, to 2100 GMT, April 10.
Rules: See February "A.R."

SILENT KEY

It is with deep regret that we record the passing of:—

VK5LW—Ross Kelly.

Did you notice the news in the press about the relaxation of import licensing for goods from the States? This means that the gear from W-land will be obtainable if you can afford to pay for it and the duty. John 4FP, for one, is now the proud owner of a beautiful Collins 75-A-4. If you want a good second best, I know John will recommend the new Geloso front-end. He bought one in ZL when he visited there last year and when he made it up, he put it in front of his Hammarlund Super Pro. The old Super Pro is a good rx, but I have never heard anything like the combination it makes with the Geloso ahead of it.

If I don't comment on that Myxamatosis crack of Bob 4RW in last month's Townsville notes, I'd never live it down. He called me on the phone a couple of days before the November general meeting and when I told him I would expect to see him at the general meeting, he said he had to leave for home a day earlier than he expected. My comment . . . chicken!!

I like to keep all my copies of "A.R." in my bookself and many times I've been asked for copies on loan. Now if you want to keep your copies of "A.R." where you can find 'em, you can't do better than buy a bound copy of the year's issues or have your own copies bound up. If you look at the para. on page 13 of the January issue you will find the solution. I saw a sample of the binding while I was at the Easter Convention last year and it's worth a lot more than is charged.

Has anyone ever heard of anything as idiotic as Willis Island being classed as a separate country for the DXCC? Willis Island is smaller than some of the small mud heaps in Moreton Bay and only has a population of two Met. boys. Just give a few minutes thought to this point before you go to bed tonight and I'll guarantee you'll have nightmares if you are a DX man.

Well, you have probably guessed that I've run out of things to write about so I'd better QRT. All the best of everything for 1960 from 4PR.

TOWNSVILLE

The New Year is off to a flying start; the Ross Hull Contest is keeping the Z boys glued to their rx's, also many of the old-time full-ticket ones. Could someone arrange a telephone installation at my QTH (no cost), then I could be advised when choice DX comes through. On Sunday, 3rd January, just gone to bed to have siesta before lunch, after working the midnight shift, when 9M2DQ, Malaya, was heard at 9 plus on c.w. working into Hong Kong from 1130 to 1210 E.A.S.T. His c.w. was a bit too fast for the Z boys and there was I snoring and dreaming of DX. Wouldn't it!

Same goes for Russ 9XK (New Guinea) who also broke through while I was not listening. Speaking of 50 Mc., congrats. to Bill 4ZBE on being the first to obtain W.A.J.D. in 24 hours. He has certificate No. 1 to prove it. Also has received his confirmation from Darwin, only wants VK6 to complete W.A.S.

As there has been no meeting of the local boys since November, the next monthly and annual meeting hopes to be a very crowded affair. Conditions have not been so good at night on 7 Mc., so unable to eavesdrop on the far Northern boys, apparently Basil 4ZW still in the dog house, hence no notes. Harry 4HK called in on the net one Sunday morning to prove we still have an opening to the North, while Arthur 4FE tries vainly to break through and only just heard in the noise level. Eddie 5OW rears up his signal on occasions to make the grade. While visiting around the town, called at Ken 4ZAK who was not home, but managed a peep through the casements of his new shack. What a splendid affair, even has a counter three parts around the room. Hope this is not for degassing 807s. How about an official opening, Ken?

Allan 4PS heard sympathising with Mike 4OM who was bemoaning having to get out of bed at dawn. Ed 4EJ and Vern 4LK away on holidays, while Bob 4MF can be heard at times upholding the Northern honors for rag-chewing on 14 Mc. Eric 4EL at times heard on 21 and 28 Mc. working into Europe. Graham 4BX has become a DX addict since putting up a beam can be heard nightly after 10.30 p.m. working choice ones like VS9OM, VU-5ANI; even climbed on his shoulders for the Andeman Is. contact. Bert 4LB still putting out a weak signal while Nick 4WT, on a temporary posting to Darwin, did not use his authority on Brian 5ZDW to populate 50 Mc. more. John 4PU heard cackling when he snagged an opening to Japan in current contest. Bob 4RW spends many hours listening on 50 Mc., even monitors Clive VK0CC freq. hoping for a break before he departs Macquarie Island, and also managed to snag three new ones on 21 Mc.: Oman, Afghanistan, and Andeman Is. (Bay of Bengal).

SOUTH AUSTRALIA

The VK5 monthly general meeting for December was held in the clubrooms to a capacity audience of 150, and took the form of the annual Xmas get-together. The attendance was an all-time record and without doubt proved just how popular this gathering has become with the members. Among those present as visitors or invited guests were Messrs. Gc vernlock, Simons, Brown, De Cure, and Traynor. Apologies were received from Mr. Kerr and Associates of the Emergency Fire Services. Among the welcome visitors were Peter Aish (G3EIX), who is over here from Marconi for the installation of ABS2; a real old-timer in Gordon Ragless (ex-5GR); and John Schrickel, who was brought along by Keith 5KH who intends to see that he becomes a member of the Division ere long.

The meeting was opened by the VK5 President and before he could say boo, somebody moved that all business be suspended for the night, and the said President (Brian, 5CA) was led away in tears and the festivities began. Before he left he announced that the Superintendent for Radio, Mr. P. Traynor, would be a little late and that a special chair had been placed at the entrance for him, and until he came it would be guarded by that muscular Hercules and doyen of the XYLs, none other than myself. Judging by the applause and what sounded suspiciously like boos, it seemed that half of the meeting was taking me for the Superintendent, and grasping my opportunity with both hands I immediately suspended the licenses of several present, warned Ted 5JE off 7 Mc. for life, kicked Johnny 5KO off 80 metres and on to phone in the 14 Mc.!!! and was just about to allow all Amateurs present to play records on any band that they liked, when Mr. Traynor arrived and spoilt the whole idea. Anyway, I had a good time whilst it lasted, even if I was only king for a few minutes.

The highlight of the evening was the film "Back of Beyond," which ran for an hour and a quarter, and proved most entertaining, judging by the applause at its conclusion. At this point the tables were set up and the goodies produced, liquid refreshment for all tastes provided, and for the next half hour or so the members gave their annual imitation of the ending of the white ants' hunger strike. For the first time in history every bottle of drink went off, we nearly ran out of tea to drink, and for a few minutes I thought that even the table legs would finish up between bread and butter. However, we saved quite a lot of the goodies from the attack, and for the information of anybody who might be interested, Doc 5MD arranged for the food left over to be delivered to the St. Mary's Home for Children, in Halifax Street, for which the Matron extends her grateful and profuse thanks.

At the conclusion of the feast everybody stood around and talked their heads off, and without exception it was voted as the best ever, which naturally pleased Council, who after all shouldered the responsibility and did the work which ensured the success of the night. The usual band of willing workers took charge of the washing up, although I detected definite signs of inexperience in handling the crockery and my demonstration of wiping up 16 saucers at once was, I am told, the highlight of the session in the kitchen. The three saucers that fell on the floor was no fault of mine, Rex 5DO deliberately knocked my arm!!

I cannot close the description of the night without alluding to the fact that I missed my usual bottling opening partner, Jim 5FO, who was unavoidably absent, but John 5KX took over and displayed an agility with the bottles which now causes me to view him with a great deal of suspicion. Jim Paris ate two strawberry sponges, half a banana cake, one dozen iced fancies, and then cleaned up a few odd scones and a couple of apple pies whilst he was preparing the supper behind locked doors. He then had the nerve to walk around among the eaters later and announce virtuously that he did not feel very hungry. He can say that again, his eyes were sticking out like organ stops. I warned him that he would never have a figure like mine if he ate that much; all he said was he hoped not. Flatterer!

Last, but not least, I am usually of a modest and retiring nature, something like a shrinking violet, but I must give myself a boost by reminding that the original suggestion for holding this type of Xmas get-together was my brain-child, submitted to Council many years ago, and given a trial by them only because that was the only way to shut me up. Some are born to greatness, some have greatness thrust upon them, and some are just naturally great, or should it be, some just naturally grate!! Anyway, in forty years from now, when I am playing second harp from the left, front row, the W.I.A. Division will still be holding its Xmas Get-together, and the President, whoever he may be, will allude in tones of deep reverence and humility to that old so-and-so with the grey hair, who first suggested this method of celebrating Xmas within the Division!!

Heard Luke 5LL back on the air the other Sunday morning on 7 Mc. and the signal was well up to the usual standard. I did not wake up that it was him at first because the other side of the contact was calling him Gil, and the name of Luke has been synonymous with 5LL for so many years now that one tends to forget that he has a christian name.

Another heard back on the 7 Mc. band was Tubby 5NO, who has returned from his business sojourn in G land, where he apparently was more than active on the Amateur bands, having worked 68 countries which included a number of VK5 boys. He was after the 100 countries whilst there, but time beat him.

Geoff 5NQ is a newcomer to the ranks but as he is the son of Tubby it cannot be said that he is inexperienced. It looks like the old motto, "First up best dressed" will apply in that household from now on, although Tubby is alluding to Geoff as his maintenance man already, so there is still hope for the old boy yet.

John ex-5QL is due back to Elizabeth from G land, probably in April, and it would seem that VK5 still has its attraction for him because he hopes to get his old call sign back. We thought that we had lost him for good. Incidentally, talking of Elizabeth, it seems that with the number of the gang who are drifting to that city these days we will have to open a sub-Division of the W.I.A. up there before long. For the benefit of my millions of Interstate readers, ahem, Elizabeth is a satellite city of Adelaide established near the Weapon Research Establishment, which explains how so many of the G boys drift in and out at various times. If it continues to expand the way it has been, Adelaide will soon be the satellite city of Elizabeth.

Joe 5JO is still keeping the flag flying on 7 Mc. and bobs up there at all odd times and weather. His XYL is not having the best of times at the moment, is being bothered with a leg ulcer, so here's hoping that as this is being read, all is well.

Arch 5XK has returned from VK7 after an enjoyable holiday over there. He had great faith in the postal department whilst over there because he sent me a letter addressed to the BBSS, Australia. It speaks volumes for them that they got their man first try, but then it could have been due to the fact that I am such a well known identity! That will be enough from you, Pincott, nobody mentioned anything about the police.

Had a talk with Cec 5BZ at the meeting and also heard him in contact with Gordon 5WI in which he was making his annual report, so he said. Now that he is in voluntary retirement (I nearly said voluntary liquidation!!), he has all the time in the world to potter around in his beloved garden and he reckons that he should have thought of retirement forty years ago, in other words he should never have started work.

News from the S.E. gang this month tells of a Xmas Get-together which saw a good mustering of old Hams, new Hams, budding Hams and listeners. So keen are they down that way that three of the regulars come about 25 miles to each meeting (from a place called Tantanoola—Hold that tiger—Hold that tiger—Hold that—Sorry its the music in me), anyway Erg 5KU brought along his projector and took all present for a trip and return to Leigh

Creek; Col 5CJ brought along some slides taken at the Warrnambool Convention, which brought forth sundry comments from the darkness, and the usual Xmas goodies wound up a thoroughly enjoyed evening. I received an invitation to attend, but the front wheel of my tricycle had a puncture so it was a bit far to walk, hence my non-appearance.

Tom 5TW was missing from the Xmas meeting, but has been heard as usual on 40, so all must be well. Stuart 5MS is still chasing the rare ones, even has a select band of listeners tuning the bands when he is at work, to ensure that nothing is missed. Claude 5CH was another absentee from the Xmas meeting, but as he sent his apologies he is excused. Probably could not get out the front door for the disposal parcels from VK3!

Leo 5GJ is not breaking any records on the air but I understand he holds the record for story-telling (both true and false). Erg 5KU is now back to the daily toil and is feeling a little collar-proud, so much so, that his well known c.w. signals have not been heard here for at least two days. Don 5ZBG is still living up to his call sign and has nothing to report. I think that it is now time for me to do a little detective work and find out the reason for the inaction. Cherches la Femme? Pardon my Latin. Col 5CJ is at the moment of writing commencing his annual vacation and will now really commence work under the supervision of the XYL. He now has a tower for his beams which he will use on the unmentionable frequencies.

Woe is me. The terrible twins, Athol 5LQ and Lionel 5LB, are looking for my blood and all because I said in the notes that they had been heard on 21 Mc. Athol offered to buy my receiver and Lionel offered to buy my ears, but I slayed them by alluding to harmonics and overtones and such technical know-how. When last seen they were armed with s.w.r. detectors, harmonic detectors, radiation detectors and finally a lie detector. The other members of this unholy alliance, Jack 5LN, said quite bluntly to use the lie detector first and save a lot of time. Oh that such wickedness could be! My faith in human nature is fast being undermined.

Graeme 5XV is at the moment attending a military camp at Alamien, a few miles on from Port Augusta, whether connected with radio I do not know. However, I can only say, thank heavens that we have a Navy!

Comps 5EF and Les 5AX, from the hamlet of Gawler (that will make them buck) attended in an official capacity the meeting of the local Boy Scouts. In line with custom, they were given their own distinguishing name and my espionage agent tells me that Les finished up with double Diode Duncan, whilst Comps finished up with Open the Daw, Richard! Oh I know its weak, but it made you slightly smile.

Noticed that the VK9 notes are being compiled by ex-VK5RG, Rob to you. I thought they were an excellent example of just how Divisional notes should be written. Short, to the point, with an entire absence of heifer dust so noticeable in the VK5 notes (what am I saying!). Anyway, nice work Rob, and when you come back you can take over my chair, providing that it has not collapsed by then.

Talking about Divisional notes, the VK2 Hunter Branch bloke scared the daylights out of me this month with his mention of Leap Year. I had quite forgotten the fact and but for his warning would have been a certainty to have been caught flatfooted. Oh Dear! It's such a nuisance being so handsome and debonair, why did I have to be behind the door when everything was handed out?

Congratulations are the order of the day to Colin 5XY, who topped his first-year medical at the University. Nice work, OM. Oh, and by the way, what about a free diagnosis, I cannot sleep at nights thinking of Editors and the cruel things they say. Treat them with ignore? Have you tried it?

Hughie 5BC has been hard at work building a one-eyed monster and I believe it was given a good try-out on the shield cricket transmissions and came through with flying colours. What's your favorite channel, Otto?

Fred 5MA is still on the rotary hoe and if he stays there much longer he will have to have some surgery to separate them. It has been hard work with the temperatures around the 100 for days at a time and we can quite understand that the call of radio is at the moment very faintly heard by Fred.

Harry 5KW is another one who seems to be coasting along with radio these days, but the big news with him is that the jalopie has been painted. All sorts of colours appeared on it before it became permanent, but to the relief of the entire population of Renmark, who were in a complete nervous state trying to decide just what the final colour would be, it has finally settled down to a reddy, greeny, orangey, black, I think.

Tom 5TL is working on a 144 Mc. converter which he expected to have finished this time last year, with extreme luck it will be ready this time next year. By way of explanation to his Morse Code class that he conducts on 3.5 Mc. each Thursday, the reason for the late start one night recently was that he was still gardening at the starting time and had lost his compass, which meant he could not find the back door through the undergrowth. I have formed the impression that he is not an enthusiastic horticulturalist.

Don 5KD at the moment of writing is putting the final touches to his transistorised rx and also to his transistorised power supply for the tx. I understand that up at Elizabeth they talk in amps, not mills., when they discuss their power supplies, I could be wrong of course.

An ex-VK3, to wit 3ZX, is now on the air from Elizabeth with the call of 5QX and is putting out a good signal on 7 Mc. I heard him say that he was having a little trouble with f.m. on that band but it was not noticeable at my QTH. I am having him screened to see if he knows Pincott at all, I don't think he does, he sounds like a gentleman to me!

Tom 5AQ is keeping the flag flying up at Leigh Creek and expects to be down here on holidays around the time of the general meeting. If I had known earlier I would have got him to bring me down some coal in his pockets. They don't call me Scrooge Parsons for nothing.

Wally 5DF not heard much here lately. I thought when the beam went up we would be putting fuses in the aerial to receive him. Of course he could have lost his sense of direction and be pointing the beam at VK3, but then who would want to point anything at VK3?

George 5EC sends his regards to all from Ceduna and adds that beside the normal afflictions of life, he now has Gordon 5XU over there for a slight stay. Oh how I hate those words, that's what mother-in-laws always say and then proceed to stay for a couple of months. Silence. Here's my XYL.

My cup of happiness was filled to the brim over Xmas by the fact that I received a Xmas card from none other than the Editor of "A.R." However, the contents of my cup quickly turned sour when I read the enclosed note in the envelope. It appears that I forwarded to the magazine a circuit of a power supply from a VK5 contributor which, in the words of the aforementioned Editor, "How in the h—— could it work without the VR tube being earthed," also "Sub-Editor, Bah!" and last but not least, "Don't try and lose the circuit because it has been photo-statted and a member of the staff of 'A.R.' has been sworn in as a witness." The crowning and deepest blow of all was the closing sentence, "It is hoped that the BBSS never let's you check any of their circuits because it would never get on the air." Never being usually stuck for words, I was a bit taken aback and can only say that I did not realise that my duties for the magazine included that of Technical Editor, and also would someone please show me the VR tube in the circuit, I can't find it! Anyway, I have had legal advice and I now throw down the gauntlet. Either the Editor goes, or I do. No longer will I take the taunts and insults heaped upon me by one who has sunk so low that he allows Short Wave Listeners to take away his old chassis and junk, rather than tip the local dustman. Once again I say, "Either the Editor goes or I do." Get out of that one Higginabothem — Higginobothom — Higgenbotti.em —or whatever your name is.

— . . . —

OBITUARY

ROSS KELLY, VK5LW

December 29, 1959, saw the untimely passing of Ross Kelly whilst at Moana Beach. Not very active in recent years on the Amateur bands, due to business commitments, but well known throughout Australia and the DX world back about ten years or so, the news of his passing so suddenly will shock not only the VK5 boys, but also Interstate Radio Amateurs who well remember the cheery voice of Ross.

He was an ex-VK5 Councillor, was the first auctioneer of the VK5 buy and sell nights, at which he held his audience in the palm of his hand with his bubbling good-nature and his ready wit, and was at all times ever ready to assist the cause of Amateur Radio in which he had such a firm belief.

Ross will be missed from the ranks by many, who will mourn his passing, and we extend to his sorrowing wife and family our sincere sympathy in their sudden and sad loss.

TASMANIA

We appreciated the call from VK3WI on the Sunday morning before Christmas when greetings from those present were conveyed to us down here, and a tape from our Federal President played. The Christmas vacation has been notable for the number of mobile and portable stations operating. Snowy 7CH on the yacht Moorina, and Bill 7YY on the James Lee, have been down at Port Davey. Keith 7RX on the Vera has several times been mobile on the Derwent estuary. Ken 7KA has been portable at Hawley on the North-West coast. Lon 7LJ has been portable at Cremorne, and Jack 7JB has been portable at Cradle Mountain. Consistently good communication was maintained with all these stations from home stations.

We have also been pleased to welcome several mainland Amateurs in the past month. Arch 5XK attended our December Institute meeting in Hobart after having landed at Devonport and toured the State to Hobart via the West Coast. Lance 3ZA, in early December, further depleted our reserves of flathead and trumpeter in Derwent, and I was pleased to entertain him one night at my QTH showing him my equipment. John 5OM has been holidaying down here since 17th December, and we were pleased to meet him at our January meeting in the South. At this same meeting, we welcomed Jim 7JO and Les 7KC, both of whom will be resident from now on in Hobart. Harold 7MZ was also a welcome visitor.

The V.h.f. Group have asked me to remind enthusiasts that the Athol Johnson Memorial Contest for Intrastate v.h.f. stations on the 50 Mc. band and above will be held from 0001, 20th, to 2359, 21st Feb., '60. Interstate contacts will be appreciated too, but such contacts cannot be used in the contest.

Roy 7ZAO was seen scampering around in early December arranging for the printing of QSL cards, following his four VK4 contacts on the 50 Mc. band the previous night; good show, Roy. Charlie 7KS was delighted the other evening to make his first phone contact outside VK when he worked a KR6. Joe 7BJ had visions of becoming a waterside worker; at least that is how he felt after he had helped in conveying 20 tons of television station equipment into the tx building after the carters had dumped the lot at the front gate. Joe is now working six days a week supervising equipment installation and expects soon to be working seven days a week to have the station radiating by the announced date in May.

Ted 7EJ has again landed the job, unopposed, of Federal Councillor, congrats., Ted.

The members from the South who constitute the Federal Contest Committee have started on the task of ascertaining the results of the VK/ZL contests, and hope to have the results published in the March issue.

Keith 7RX has again had holidays, and spent two weeks in mid January down at Dover. Rupe 7RM has his rig working on the 21 Mc. band now and is putting out a very readable signal at my QTH. Max 7MX has had his system on modulation adopted by Amateurs, mainly in VK3, and it shows what negative clipping can do to permit filling the carrier to its limits without splatter. Max 7CA has been in the news by receiving Brisbane television in Launceston.